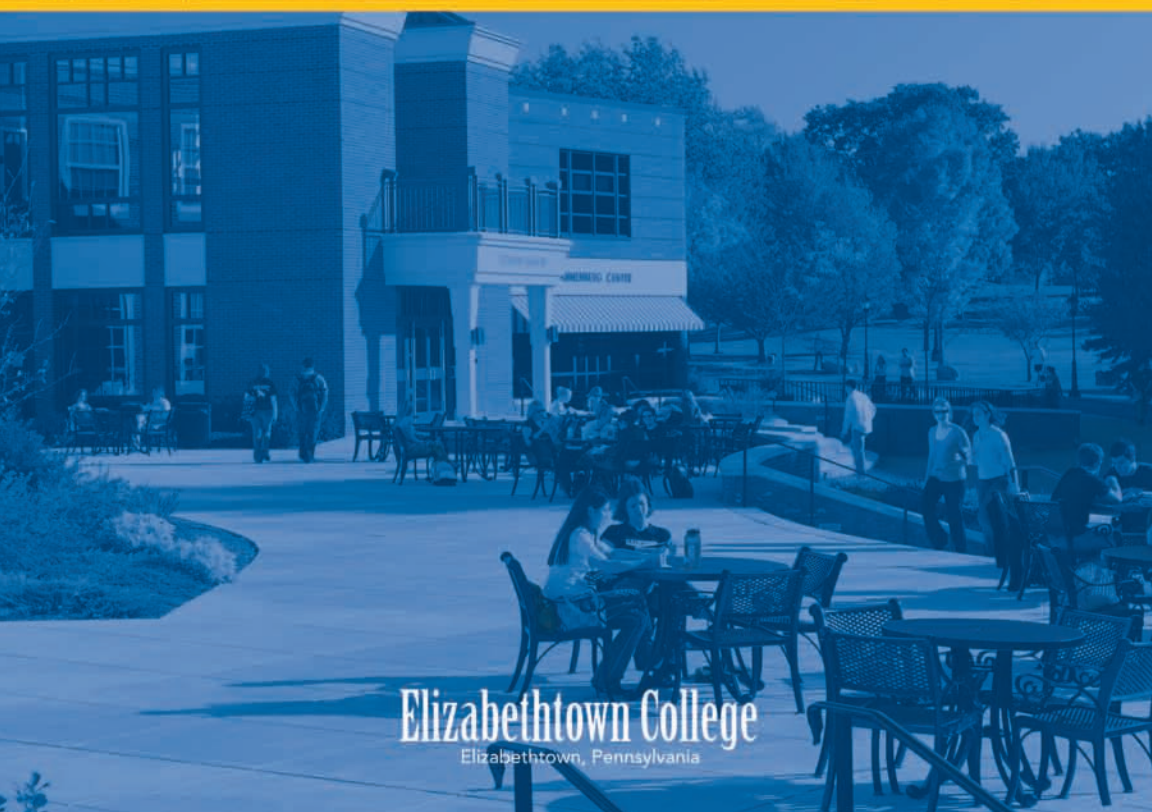
2008–2009
COLLEGE CATALOG



Elizabethtown College
Elizabethtown, Pennsylvania

COLLEGE CATALOG 2008-2009

Elizabethtown College

The provisions and requirements stated in this Catalog (and its electronic counterpart at www.etown.edu) are not to be regarded as an irrevocable contract between Elizabethtown College and the student. The College reserves the right to change any provision or requirement at any time. All students are responsible for adhering to the requirements, rules, regulations and procedures, whether published in this Catalog, the Student Handbook or other official media.

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Elizabethtown College

Mission

Vision

The Qualities of Our Education

History

Elizabethtown Today

Elizabethtown College

Founded more than a century ago, Elizabethtown College is a respected private institution with academic programs in both the liberal arts and applied studies. Located on a beautiful campus in southeastern Pennsylvania, the College consistently has been rated as one of the top institutions in the North by U.S. News & World Report. The men and women who study at Elizabethtown enjoy a dynamic learning environment that engages the mind and heart, nurtures service and leadership, advances personal development and social transformation, and embraces the world of work and the domain of the spirit.

Mission

Molded by a commitment to "Educate for Service," Elizabethtown College is a community of learners dedicated to educating students intellectually, socially, aesthetically and ethically for lives of service and leadership as citizens of the world.

As a comprehensive institution, the College offers academic programs in the liberal arts, sciences and professional studies. Combining classroom instruction with experiential learning, these programs advance independent thought, personal integrity and social responsibility as the foundations for a life of learning.

Founded by members of the Church of the Brethren, the College believes that learning is most noble when used to benefit others and to affirm the values of peace, non-violence, human dignity and social justice.

Vision

This College is a place of intellectual adventure where boundaries are erased and the excitement of discovering new ideas occupies center stage. Learning occurs inside and outside the classroom. Faculty members are actively engaged in scholarly activity, because the College values intellectual curiosity and this important work informs and enhances teaching. Members of the College community come from all walks of life and backgrounds, and this mix enriches the culture of the campus. Respected for their diverse and unique contributions, community members also possess a sense of common purpose.

The Qualities of Our Education

Our educational experience blends a high standard of scholarship with four signature attributes, which include commitments to educate our students in a relationship-centered learning community, to foster in our students international and cross-cultural perspectives, to complement classroom instruction with experiential-learning opportunities, and to prepare our students for purposeful lives and meaningful work.

Relationship-Centered Learning

Elizabethtown College is a place of people – individuals who live and learn in relationship to each other. At the College, students receive personal attention, as all employees commit to expressing sincere and genuine interest in the educational success of our students. Our College's classes deliberately are kept small to support our students' individual needs and challenge them to grow.

Our educational programs engage students in ways that capture their most profound attention, confront them with learning experiences that are compelling, and call out from them responses that reach beyond what even they thought possible. In this learning community, our faculty members and other employees demonstrate their passion for their subjects and for continued learning so that our students see how compelling deep engagement is.

International and Cross-Cultural Perspectives

Students today must be familiar with and understand the interconnected ways of life in the 21st century. When students enroll at Elizabethtown College, they encounter this international world in a variety of ways. Our staff includes faculty members and other employees who are citizens of countries from around the world, who speak a multitude of languages, and who have had myriad study and residential experiences on other continents. Students study alongside students from countries distinct from their own. Additionally, they encounter our international world when they visit, study in or live in cities as diverse as Harrisburg, Philadelphia, London, Beijing and Quito.

Elizabethtown offers a globalized curriculum and co-curriculum. Programs of study and student development help students understand and effectively engage other cultures and the globalization of life and work. The College lifts up peace-making as a feature of global education.

Experiential Learning

Elizabethtown seeks to broaden the contexts for student learning by fostering educational experiences through which students learn by doing. Through this experiential learning, students develop the aptitude to link theory and experience, and they are better prepared to continue learning throughout their lifetime. These opportunities are available through internships and externships, field placement assignments, independent and collaborative research projects, service-learning and community volunteer work, leadership development and campus enjoyment.

Purposeful Life Work

To enable them to respond to the dynamic work environment of the 21st century, our students are prepared not only with foundational skills for career job placement but also for life-work changes that evolve throughout a lifetime. In both the

curriculum and co-curriculum, the College's educational program fosters an understanding of education for a life of purpose based on a holistic model of student development that integrates career development; reflection on vocation, meaning and life; and a commitment to civic engagement.

As a result, graduates of Elizabethtown are prepared to make the world a better place. They do so, in part, by living in ways that reflect their individual commitments, respond to the needs of others, and value personal and ethical integrity.

History

Elizabethtown College was established by representatives of the Church of the Brethren on September 23, 1899. As outlined in our charter, the purpose of the College was "to give such harmonious development to the physical, mental and moral powers of both sexes as will best fit them for the duties of life." On November 13, 1900, classes began for six students in the Heisey Building, located in downtown Elizabethtown. Tuition was one dollar per week per course.

During the early years, the institution operated as an academy, offering a limited curriculum. In 1921, the Pennsylvania Department of Public Instruction accredited the College and authorized it to grant bachelor's degrees in the arts and sciences. In May 1948, Elizabethtown was accredited by the Middle States Association of Colleges and Schools.

Elizabethtown Today

Since the late 1940s, Elizabethtown has grown significantly – in our student and faculty population, in our academic and co-curricular offerings, and in the number and quality of our facilities.

Currently, about 1,950 students are enrolled full-time at the College, the most in our history. These young men and women come from more than two-thirds of the states in this country and more than 40 nations. Educating these students are 130 full-time faculty members whose qualifications, achievements and dedication are to be admired.

Elizabethtown offers almost 50 majors and 80 minors and concentrations. This extensive list of programs – which is detailed in this Catalog – allows our students to prepare for a broad spectrum of graduate programs and careers. As evidence of their caliber, our programs have been accredited by a variety of organizations, including the Association of Collegiate Business Schools and Programs, the American Chemical Society Committee on Professional Training, the National Accrediting Agency for Clinical Laboratory Sciences, the Accreditation Council for Occupational Therapy Education of the Occupational Therapy Association, the Council on Social Work Education, and the American Music Therapy Association.

To provide the superior classrooms and cutting-edge technology necessary to prepare our students for their future, the College has enhanced its facilities significantly over the past several years. Today, the 200-acre suburban campus is a beautiful marriage of stately 1990s architecture – symbolic of the College's century-old heritage – and state-of-the-art academic and co-curricular buildings.

At the heart of campus, the Baugher Student Center is the hub of student activity at Elizabethtown. With the recently constructed Brossman Commons addition, the Center offers student support through its Center for Student Success, which provides comprehensive academic and career support. Students who wish to take advantage of the many activities on campus can visit the Center for Student Involvement. The Baugher Student Center also offers several dining options, which provide something for every palate. Additionally, the facility includes our Tempest Theatre, home to the College's theatrical performances; a new student lounge; the College Store and on-campus post office.

At the edge of campus sits Leffler Chapel and Performance Center, a beautiful venue for showcasing the talents of world-class performers and speakers who are hosted by Elizabethtown College. Highlighting the year are the annual Ware Lecture for Peacemaking, which has hosted speakers like former President of Ireland Mary Robinson and Nobel Prize Winner F.W. de Klerk, and performances by the College's talented musical ensembles. Also, through our partnership with Gretna Music, Elizabethtown hosts musical performers of international renown. Almost all events are free of charge for students.

Our new student residences – including the Hackman Apartments and Schreiber Quadrangle – and athletic facilities also have greatly enhanced student life.

The James B. Hoover Center for Business opened as the new home for the College's perennially strong business program in fall 2006. Its modern facilities provide our students with a learning environment in which they can gain the experience needed to handle real-world business issues with expertise and integrity. This building also houses the Edward R. Murphy Center for Continuing Education and Distance Learning, which provides a variety of learning programs for adult learners, and the S. Dale High Center for Family Business, which provides support to central Pennsylvania's family businesses.

In fall 2008, the College completed the final phase of the Masters Center for Science, Mathematics and Engineering. This facility – which includes the new Lyet Wing for Biological Sciences – provides the classrooms, modern laboratories and research facilities essential for a 21st-century science education.

We invite you to visit us – either through our website at www.etown.edu or at our campus – to learn more about Elizabethtown College.

Admission to the College

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Admission to the College

The Elizabethtown College Office of Admissions seeks qualified students from a wide range of geographic, socioeconomic, ethnic, religious and cultural backgrounds. While the ability to meet the challenges presented by Elizabethtown's curriculum is the primary consideration, all aspects of the applicant's profile can and will be considered.

Elizabethtown College emphasizes personal attention throughout the admissions process, and the Office of Admissions strives to assure the proper "fit" for both the College and the student. As such, Elizabethtown encourages applications of students who will contribute to and benefit from the College's academic, co-curricular, service and cultural programs. Each application is carefully reviewed to determine the student's seriousness of scholarship, range of talents, and depth of character using the following guidelines:

Applicants must graduate from an accredited secondary school or a state Department of Education-approved program with at least four years of English, three years of mathematics, and two years each of laboratory sciences, social studies and foreign languages.

Accompanying recommendations from a school guidance counselor and an academic course teacher must attest to the academic ability, potential and personal character of the applicant.

Unless they qualify for the Standardized Testing Waiver, applicants must submit the results of standardized tests such as the Scholastic Aptitude Test (SAT) of the College Board or the American College Testing (ACT) Assessment to provide a measure of aptitude for academic success in college work.

Students who rank in the top 10 percent of their high school class are able to waive their standardized test score from Elizabethtown's review for admission and merit-based scholarship consideration. If a student attends a high school that does not rank, a grade point average of 3.50 or better (on a 4.00 scale) will allow that student to waive his/her standardized test scores.

The application form must include references to participation in activities, arts, service, athletics and other interests beyond the classroom, which indicate the talents, leadership and abilities that the student will bring to the Elizabethtown community.

A writing sample – essay, personal statement or graded paper – must be provided as an example of the student's ability to clearly communicate his or her thoughts.

A campus visit is strongly recommended.

An interview is required for students applying to the Elizabethtown College Honors Program and the occupational therapy program and is strongly recommended for all other applicants.

The following lists provide some insight into what Elizabethtown considers in the areas of academic, co-curricular and social fit:

Academic	**Co-Curricular**	**Social**
Quality of curriculum	Athletic ability	Integrity
SAT/ACT scores	Musical ability	Persistence
Grade point average	Dramatic ability	Seriousness of attitude
Rank in class	Service and leadership	Appreciation for the College
Letters of recommendation	Work experience	Interest in Elizabethtown
Academic awards/honors	Activity involvement	Work ethic

Requests for applications and other information regarding admissions should be directed to:

Office of Admissions
One Alpha Drive
Elizabethtown College
Elizabethtown, PA 17022-2298
(717) 361-1400
admissions@etown.edu
www.etown.edu

The Application Process

Elizabethtown College admits students on a "rolling" basis with an application deadline of March 1. Most prospective students apply before January of their senior year. The Office of Admissions begins to notify students of acceptance decisions after senior grades become available – usually in mid- to late-November – and continues to admit students until late spring. Students who are offered admission to the College must respond to the offer by May 1 for the following fall semester.

An application is considered complete when the following items are submitted for review:

Elizabethtown College Application for Admission. The use of the online application is encouraged and can be accessed on the College website (www.etown.edu – click on *Apply Now!*). The Common Application also is accepted. The $30 application fee payable to Elizabethtown College is waived for students who apply online or who interview on campus.

School Report and Recommendations. Applicants should take the application's school report form to the appropriate high school office to be filled out and submitted. Additionally, at least one teacher must complete a letter of recommendation on behalf of the applicant. Applicants may submit additional recommendations from other individuals who know him/her well, such as a coach, musical director, clergy member or employer.

Official High School Transcript. All applicants must submit an official high school transcript that includes first marking period grades from their senior year. All applicants should submit mid-year grades as they become available.

Standardized Testing Results. Unless they qualify for the Standardized Testing Waiver, applicants are required to submit scores from either the SAT I or ACT. Official scores should be sent directly to Elizabethtown College (SAT code #2225 and ACT code #3568).

Writing Sample. All applicants must submit an example of their writing. They may choose to submit a personal statement, a graded paper or an essay on one of the topics suggested in the application.

International Applicants

In addition to the previously stated requirements, international applicants also must submit the following items:

The International Student Visa and Financial Aid Application. Contact the Office of Admissions to request this form.

Personal Statement. A 250-word personal statement discussing their choice to apply to Elizabethtown College.

TOEFL Results. The official results of the Test of English as a Foreign Language (TOEFL).

Transfer Applicants

Transfer applicants in good social and academic standing at an accredited college, university or two-year institution are encouraged to apply. Transfer students are accepted for both the fall and spring semesters.

All transfer applicants must submit the transfer student section of the application. In lieu of the school report, transfer applicants should submit a second letter of recommendation from a professor, teacher or employer. Additionally, all transfer applicants must submit a high school transcript and official transcripts from all

previous college work. Transfer applicants who have graduated from high school within the past five years also must submit standardized test scores.

The Office of Registration and Records will evaluate transcripts to determine the number of credits – up to 64 from a two-year institution – that will transfer for Elizabethtown College credit.

Special Application Requirements

Because of limited and selective enrollment opportunities, applicants to some of Elizabethtown's programs are encouraged to submit an application earlier than the normal deadline of March 1. Those programs, with their suggested application deadlines, are as follows:

Elizabethtown College Honors Program	January 15
Occupational Therapy Program	December 15
Pre-Med Primary Care Program	December 15
Doctor of Physical Therapy Program	December 15

Students considering a degree in Music, Music Therapy or Music Education must complete an audition and are encouraged to contact the Department of Fine and Performing Arts at (717) 361-1212 to learn more. Audition forms are available online through the Department's website (www.etown.edu/FAPA).

Personal Interviews and Campus Visitations

A personal interview with a member of the Admissions staff is strongly encouraged for all prospective students. It is suggested that prospective students plan to interview prior to January 1 of their senior year. Campus interviews and tours are available throughout the year. The interview typically lasts between 45 minutes and one hour, and the tour can take place prior to or immediately following the interview. Individual appointments are scheduled between 9 a.m. and 3 p.m., Monday through Friday. Morning appointments also are available on select Saturdays in the fall. Simply contact the Office of Admissions at (717) 361-1400 to schedule a visit.

Many on-campus programs are available throughout the year. Contact the Office of Admissions or visit the College's website (www.etown.edu) for the dates of Open Houses and other specialized on-campus programs.

Advanced Placement

Elizabethtown College participates in the Advanced Placement (AP) program of the College Board. Depending upon approval of the Department concerned, the College grants advanced placement credit to students who score four or better

on the College Entrance Examination Board (CEEB) AP examinations. In some cases a student receiving a score of three on the AP will be granted credit. Please visit the Office of Registrations and Records website at www.etown.edu/registration for our current AP credit policy. Credit through the International Baccalaureate Program may be granted for scores of five or six on the higher-level examinations, depending upon the Department concerned. (See the chapter on Academic Policies for more information.)

Non-Degree Students

Students who are not candidates for a degree but who wish to enroll in one or more courses should complete the College's application for admission. Non-degree applicants should arrange for an admissions interview to discuss course selection and special application requirements.

Early-Admission Students

Superior high school students may accelerate their higher education by beginning their college work immediately after completion of their junior year. Students who are admitted enter the College as a regular first-year student. When they successfully complete their first year, they receive their high school diploma in addition to the college credits earned. This program has the cooperation and support of the Pennsylvania Department of Education.

In addition to the fundamental requirement that early-admission applicants must have completed their 11th year in an accredited curriculum, they must exhibit the mental ability, scholastic achievement, social maturity and personal motivation to adjust to the academic and co-curricular programs of the College. Following enrollment, early-admission students receive close academic advising by selected faculty members.

Early admission to Elizabethtown College after careful, individualized screening is based on the following:

Class Rank and Academic Aptitude. To be considered, students must rank among the top of their high school class and achieve a superior result in the CEEB Scholastic Aptitude Test.

Recommendations. Written by the student's high school principal, guidance counselor and teachers, recommendations must indicate the student's suitability for early admission.

Parental, High School and Elizabethtown College Support. The written approval of the student's parents, high school principal and guidance counselor is mandatory before acceptance. Included in the approval is the

assurance of a high school diploma upon successful completion of the first year at Elizabethtown. The selection process also requires an interview with the Office of Admissions.

Elizabethtown College Honors Program

Admission to the Elizabethtown College Honors Program, which is sponsored by a grant from The Hershey Company, is very competitive. The minimum standard for admission is a combined score of at least 1800 on the SAT (with no score below 550) or equivalent on another standardized test (TOEFL or ACT), a rank within the top ten percent of the student's high school graduating class, and review by the Honors Committee acting on the recommendation of the Office of Admissions.

The application deadline for the Honors Program is January 15. Notification is guaranteed by February 15. Students interested in the Honors Program are required to have an on-campus interview with an Admissions officer.

A limited number of students are accepted to the Honors Program during their sophomore year. These students must demonstrate excellence in their first-year courses, provide recommendations from at least two Elizabethtown professors, and have the concurrence of the Honors Committee. Rising sophomores must apply by June 1 for consideration. (For more information, see the chapter on Academic Programs.)

Tuition and Financial Aid

Tuition and Fee Information
Financial Aid
Institutional Refund Policy
Return of Federal Student Aid

Tuition and Financial Aid

Elizabethtown College offers students an excellent and affordable educational experience. Not only is Elizabethtown one of the top rated colleges in the North, we also are rated as one of the region's best values.

We understand, though, that students and their families may have some difficulty meeting the full cost of a college education without some help. For all those who are accepted, Elizabethtown helps to make private education affordable through merit-based scholarships and need-based financial aid.

Eighty-five percent of our students receive some financial assistance. Scholarships – which could be as much as one-half of the total cost of tuition – are awarded to more than half of our incoming first-year students based on their academic and co-curricular achievement. Additionally, our financial aid counselors will work with families to determine their ability to qualify for need-based financial aid from the College and from state and federal agencies.

Tuition and Fee Information – 2008-2009

Full-time students – those who are taking 12 to 18 credit-hours per semester – will pay a comprehensive annual fee. Students who take fewer than 12 credit-hours are considered part-time and will pay per credit-hour based on the type of course in which they are enrolled. Course credits, internships, directed and independent studies, tutorials, audit courses and private music lessons are combined to determine the student's status as part-time, full-time or full-time with overload (for those who are taking credits in excess of 18 per semester).

Full-Time Students

Comprehensive Fees

	Annual Rate	Resident	Independent Living Units	Commuter/ Off-Campus
Tuition	$30,650	x	x	x
Room - Traditional	$3,950	x		
Room - Ind. Living Unit	$4,600		x	
Board	$4,000	x		
Comprehensive Fee		$38,600	$35,250	$30,650

Elizabethtown College's full-time students have access to campus facilities and programs. Included in the comprehensive fee is the use of the High Library, Baugher Student Center, Body Shop, gymnasium and athletic fields. Full-time students also receive free admission to all regular season athletic events that are held on campus and most of the cultural activities that are offered by the College. Additionally, they receive a subscription to the Etownian, which is the student-run newspaper, and they are provided with certain free Health Center services.

Partial meal plans are available to students residing in Independent Living Units and to non-residential students for an additional cost. Please contact the Business Office at (717) 361-1417 for details.

Other Fees

By May 1, all applicants must send a non-refundable deposit of $200 to the Office of Admissions. This deposit will be held as a security deposit. All full-time students are required to maintain a $200 security deposit on account.

Full-time students may carry up to 18 credits per semester. A cumulative grade point average of 3.20 is required to carry more than 18 credits, with the maximum allowed credit load being 19 credits. The excess credit will be invoiced at the current part-time, daytime course rate of $740 per credit-hour.

Part-Time Students

Daytime Courses

Tuition per credit-hour	$740
Audit per credit-hour	$250

Evening and Summer 2008 Courses

Tuition per credit-hour	$470
Audit per credit-hour	$160

All Students – Miscellaneous Charges

Challenge Testing

For Credit	$105
For Placement/Waiver	$ 70

In addition, 50 percent of the appropriate part-time tuition rate in effect at the time the test is administered is charged for academic credits awarded as a result of performance on the challenge tests.

Administrative Fee

Title IV Return of Funds	$100
Approved Off-Campus Study/Semester	$200

Late Fee $ 50

Late fees are assessed for occurrences such as late registration, late course changes and late payment of fees. Please see the section titled "Tuition Payment Policy" for additional details.

Surcharges

Directed Study – per credit-hour	$100
Tutorial – per credit-hour	$150

Transcripts Free-of-Charge

No transcripts of records will be furnished to anyone whose account is not paid in full.

Tuition Payment Policy

All charges are due on or before the due date for each semester. Checks should be made payable to Elizabethtown College.

Full-time students are sent a bill in July and December for one-half of the annual comprehensive fee. All confirmed financial aid is listed on the bill. Students should compare the bill with their latest financial aid award letter and deduct from their bill any aid not listed, excluding Federal Work Study (FWS).

Elizabethtown College does not accept direct monthly installments or deferred payments for tuition. However, certain third-party tuition plans are accepted. For more information, please contact the Financial Aid Office at (717) 361-1404 or the Business Office at (717) 361-1417.

All amounts not received by the due date are subject to a one-time late payment fee of $50 and monthly interest at a rate of 1.5 percent per month, which is 18 percent per year. Loan funds – such as Federal Stafford, Federal PLUS, private loans, etc. – or any other sources of financial aid not received by the due date also are subject to a late charge and interest. In order to help ensure timely receipt, all loans should be applied for prior to July 1.

Financial Aid

Elizabethtown College's Financial Aid Office assists enrolled and prospective students in finding the financial means to allow them to fully participate in the educational experience at Elizabethtown College. Services include providing current information and resources, budgeting assistance, debt management advice and suggestions for financing a college education. The office is open from 8:30 a.m. until 5 p.m., Monday through Friday. (The office's summer hours are 8 a.m. until 4:30 p.m.) It is located on the first floor of Zug Memorial Hall.

Students interested in need-based financial aid must complete the Free Application for Federal Student Aid (FAFSA) and the Elizabethtown College

Need-Based Financial Aid Application. Current federal income tax returns and W-2 forms also are required to complete the process. It is strongly recommended that students complete FAFSA electronically at www.fafsa.ed.gov. Elizabethtown College's Title IV code is 003262. Applicants should apply for financial aid no later than March 15.

All applicants are considered for merit-based scholarships during the admissions application review. Some of these scholarships include the approximately 100 endowed scholarships and gifts that are available to Elizabethtown College students through the generosity of the College's alumni and friends. Notification of these scholarships follows the offer of admission, but precedes any need-based awards.

All requests for applications and other information regarding need-based financial assistance should be directed to:

Financial Aid Office
One Alpha Drive
Elizabethtown College
Elizabethtown, PA 17022-2298
(717) 361-1404
finaid@etown.edu

For more detailed information regarding Elizabethtown College's financial aid programs, individuals may request a copy of the "Financial Aid Handbook" from the Financial Aid Office or visit the Financial Aid website at www.etown.edu/FinancialAid.

Federal Financial Aid Requirements

We Have a Right to Ask

All information requested by the Financial Aid Office is authorized by law. The legal right to ask applicants to provide their social security number is based on Section 7(a)(2) of the Privacy Act of 1974 (P.L. 93-579).

All applicants for financial aid at Elizabethtown College are advised that disclosure of their social security number is required as a condition of participation in federal, state and institutional financial aid programs. The applicant's social security number is used in conjunction with the College identification number to identify the applicant's financial aid application and account at Elizabethtown.

The legal right to ask for all other information is based on sections of the law that authorize the Federal PELL Grant, SEOG, FWS, Perkins and Stafford programs. These include sections 411, 413B, 443, 464, 425, 428 and 482 of the Higher

Education Act of 1965, as amended. Any information submitted is subject to verification. If applicants do not supply proof when asked, they will not receive financial aid.

Referral of Fraud

Cases of suspected fraud on the part of a Title IV aid applicant involving information relevant to a student's eligibility or amount of assistance will be referred to the U.S. Department of Education. The following circumstances are indicative of possible fraud when the aid administrator can find no other legitimate reason for the discrepancy: 1) false claims of independent student status; 2) false claims of citizenship; 3) use of false identities; 4) forgery of signatures or certifications; and 5) false statements of income. Any referrals made to a local or state law enforcement agency also will be reported to the Office of Inspector General within the U.S. Department of Education.

Viewing an Application File

If students think that an error in their financial aid package stems from information in their file in the Financial Aid Office, they may review their file at any time, according to the Family Rights and Privacy Act of 1974. To see a file, students should call the Financial Aid Office.

The Financial Aid Office treats each student's file with sensitivity and utmost confidentiality. The financial information in these files is released only to those who have contributed to it, i.e., the student and, if he or she is a dependent, his or her parents. Students must give written and signed permission before the College will release information from their file to a third party. All students should keep copies of their tax returns, as the College's copies cannot be returned.

Institutional Refund Policy

If enrolled students choose to leave the College, they must give written notice of withdrawal to Counseling Services. The effective date of withdrawal for calculating refunds is the date of acceptance by Counseling Services. Refunds must be requested in writing.

Failure to provide notice of withdrawal will result in an unofficial withdrawal. Refunds and transcripts will be withheld by the College until an official withdrawal has been obtained.

If the withdrawal occurs within the three weeks prior to registration, a resident student is liable for a $150 room penalty in addition to his or her deposit.

If a student withdraws or changes credit-hours and/or room-and-board status after the beginning of the semester, the student is obligated to pay the actual room-and-board used to the date of withdrawal plus 25 percent of the unused

room-and-board charges. Tuition refunds are calculated as follows:

Withdrawal in first week of classes	75 percent
Withdrawal in second through third week of classes	50 percent
Withdrawal in fourth week of classes	25 percent
Withdrawal at the beginning of fifth week of classes	0 percent

Refunds of tuition and room-and-board charges for a withdrawal due to medical reasons are prorated to the date of withdrawal. A student who is absent from College because of sickness or other reason and who retains a place in class must pay in full during the absence.

Students who are dismissed or suspended from the College are refunded tuition charges according to the standard policy. Board charges are prorated to the date of dismissal or suspension and a 25-percent surcharge of the unused board is assessed. No room refunds are granted under these circumstances.

Return of Federal Student Aid

Under HEA98 Public Law 105-244, the Department of Education stipulates the way funds paid toward a student's education are to be handled when a recipient of funds from the Student Financial Aid (SFA) Program withdraws from school.

A statutory schedule based on the period the student was in attendance is used to determine the amount of SFA Program funds a student has earned when he or she ceases attendance. Up through the 60-percent point in each payment period or period of enrollment, a pro rata schedule is used to determine how much of the SFA Program funding the student has earned at the time of withdrawal. After the 60-percent point in the payment period or period of enrollment, a student has earned 100 percent of the SFA Program funds.

In general, the amendments require that if a recipient of SFA Program assistance withdraws from school during a payment period or a period of enrollment in which the recipient began attendance, the school must calculate the amount of SFA Program assistance the student did not earn and return those funds.

The percentage earned is one of the following:

> If the date of student withdrawal occurs on or before the student completed 60 percent of the payment period or period of enrollment, the percentage earned is equal to the percentage of the payment period or period of enrollment that was completed.
>
> If the date of student withdrawal occurs after the student completed 60 percent of the payment period or period of enrollment, the percentage earned is 100 percent.

The percentage and amount not earned is the complement of the percentage of SFA Program assistance earned multiplied by the total amount of SFA assistance that was disbursed and that could have been disbursed to the student or on the student's behalf for the payment period or period of enrollment as of the day the student withdrew.

For credit-hour institutions, the percentage of the payment period or period of enrollment completed is the total number of calendar days in the payment period or period of enrollment for which the assistance is awarded divided into the number of calendar days completed in that period as of the day the student withdrew.

If the student receives less SFA Program assistance than the amount earned, the school must comply with the procedures for late disbursement specified by the department in regulations. If the student receives more SFA Program assistance than the amount earned, the school and/or the student must return the unearned funds as required and in the order specified.

The school must return the lesser of: 1) the amount of SFA Program funds that the student does not earn or 2) the amount of institutional costs that the student incurred for the payment period or period of enrollment multiplied by the percentage of funds that was not earned.

The student – or parent, if a Federal PLUS loan – must return or repay, as appropriate, the remaining unearned SFA Program grant and loan funds. However, a student is not required to return 50 percent of the grant assistance received by the student that is the responsibility of the student to repay.

The student – or parent, if a Federal PLUS loan – must return the unearned funds for which they are responsible to the loan program in accordance with the terms of the loan and to grant programs as an overpayment. Grant overpayments are subject to repayment arrangements satisfactory to the school or overpayment collection procedures prescribed by the Secretary of the Department of Education.

SFA Program funds for the payment period or period of enrollment for which a return of funds is required must be returned in the following order: 1) unsubsidized Federal Stafford Loans; 2) subsidized Federal Stafford Loans; 3) Perkins Loans; 4) Federal PLUS loans; 5) Federal PELL grants; 6) Federal Supplemental Educational Opportunity Grants; and 7) other assistance under Title IV regulations.

Student Life

- Dean of Students
- Athletics
- Office of Student Rights and Responsibilities
- Health Services
- Residence Life
- Center for Student Success
- Center for Student Involvement

Student Life

Elizabethtown College recognizes that learning and achievement extend beyond the classroom.

Through the Division of Student Life, we provide students with the opportunity to make connections with campus resources, to develop necessary skills for success, and to productively join in college life. Elizabethtown offers a comprehensive collection of co-curricular programs and services that supports our students' growth and development and enriches their college experience.

Dean of Students

Elizabethtown's Dean of Students serves as the chief student affairs officer and the primary advocate for our students. The Dean – together with the Student Life staff – works with students and faculty to shape the living and learning environment and enhance the quality of life for all students.

Athletics

Elizabethtown College proudly sponsors one of the top NCAA Division III intercollegiate athletic programs in the nation. Enjoying a 75-year tradition of success, the Blue Jay's 20-team, 13-sport varsity program operates within the principles and rules of the NCAA and the Middle Atlantic States Collegiate Athletic Corporation's philosophy of amateur student-athlete participation. Our exceptional coaching staff believes in the importance of integrating our students' academic and athletic experience.

All Elizabethtown students receive free admission to home contests. Together, the entire campus community joins in cheering our Blue Jays on to victory.

Elizabethtown College also offers a multi-sport intramural program, including soccer, flag football, basketball, softball, water polo, etc. Together with our varsity program, our intramural program provides students of all abilities and interests with a variety of opportunities to learn through athletic competition and to remain physically fit.

Office of Student Rights and Responsibilities

The Office of Student Rights and Responsibilities upholds practices of a facilitative and fair nature, respecting and upholding individual rights while balancing these with community integrity, honesty, civility and safety. The Office holds the primary function in investigating and resolving alleged incidents while working collaboratively with many community members, such as the Dean of Students and staff members of such organizations as Residence Life, Campus Security, the Athletics Department, the Center for Student Success, and the Office

of Diversity. Further, this Office is dedicated to enriching the social learning experiences of students, whether it be within a hearing discussing integrity or by training Peer Board members about higher education leadership. The Office staff takes pride in their daily interactions with students, especially in the staff's goal of proactively educating students not only about the College's policies and procedures but also about the College's goals of living healthy, balanced and ethically rich lives.

Health Services

Health Services views students holistically and supports them in managing their health. In addition to helping students during illness, staff and student para-professionals regularly offer wellness programs and individual consultations to help students stay healthy. Our Health Services staff wants students to learn how to become advocates as well as good consumers for their health care.

The Health Center is staffed by full-time nurses and a nurse practitioner and has limited physician hours available on a weekly basis.

Residence Life

Elizabethtown College students – who are required to live in campus housing unless they are approved to live off-campus – are offered a variety of housing options. These include traditional residence halls, on-campus town houses and apartments, and Student-Directed Learning Communities.

In the traditional residence halls there are several floors designated as Learning Communities, which are focused residential living/learning environments. In addition, students have the opportunity to live on floors that are designated as either Substance Free or Quiet Study.

Sophomores, juniors and seniors have the option to apply to live in our Student-Directed Learning Communities (SDLCs). Established in 1992, SDLCs are housing opportunities in College-owned homes along the perimeter of the campus. These houses offer small groups of students the opportunity to create a unique, self-directed living environment, centered on a common theme, issue or interest through which the group is expected to serve others and enrich the campus or the neighboring community.

Residence Life staff members and student resident assistants create engaging programming and activities that enhance campus life and continue the educational experience outside of the classroom.

Center for Student Success

The Center for Student Success provides comprehensive academic and career support services to Elizabethtown College students. The Center is comprised

of distinct yet integrated service areas, including the following: Academic Advising, Career Services, Counseling Services, Disability Services and Learning Services. Additionally, the Center's Director chairs Elizabethtown's Campus Wellness Network.

Academic Advising

Academic Advising assists students in the development of meaningful educational plans that are compatible with their life goals. This assistance – which supports and complements the faculty advising system on campus – is offered to all students at Elizabethtown College.

First-year students are assigned a faculty advisor, who also is their First-Year Seminar instructor. In their second semester, first-year students may declare a major and, if they do, will be assigned a faculty advisor from the Department of their chosen major. Deciding or undeclared students continue to use their first-year advisor for another semester, and thereafter will be assigned to one of our professional advisors from Academic Advising until they declare a major. Additionally, our students benefit from support and guidance from trained peer mentors, resident assistants and Student Life staff.

At Elizabethtown, we strive to provide those students who are experiencing difficulty with support when it is the most productive – early in the situation's development and while there is still an opportunity to resolve it with a successful outcome. This office uses a time-proven, five-week early warning system, which is intended to identify first- and second-year students in jeopardy. This early-warning system provides intervention, referral and support. Additionally, Academic Advising provides support to all students at the College who fall below a 2.00 grade point average.

Career Services

Career Services assists students with all aspects of the career development process – from career and major selection to finding employment after graduation. A career counselor is available to help students explore majors and careers; prepare applications and obtain graduate school information; and develop the job search and interview skills that are necessary to find internships and full-time employment.

To explore their career interests, skills and values, students may meet with a counselor to utilize a computer-based guidance system or inventory. Participation in career fairs, graduate school fairs, on-campus recruiting, and Jobs for Jays – our online job and internship posting system – provides students with an opportunity to connect with potential employers.

To help students during their career search, Career Services maintains a website with links to useful career information and an on-campus resource library. Also,

this office offers workshops that help students with writing resumes and cover letters, developing job-search strategies, and strengthening interview techniques.

Counseling Services

Counseling Services provides a broad range of counseling and mental health support services that facilitate our students' personal and educational development. Counselors offer short-term counseling, consultation and/or referral for most issues of concern, including adjustment, conflict, stress, sexuality, abuse, body image, eating disorders, depression, anxiety and suicidal thoughts.

Counseling Services is staffed by clinical psychologists and has limited psychiatrist hours available on a monthly basis.

Disability Services

Disability Services helps students with disabilities gain equal access to Elizabethtown's services, programs and facilities through reasonable accommodations.

Elizabethtown College does not inquire about disabilities in the admissions process and will not deny a student admission because of a self-disclosed disability. It is our practice to send all new students a Disability/Special Needs Identification Form, which must be completed and returned by June 1 for fall semester enrollment and December 15 for spring semester enrollment. Upon receipt of the form, the Director of Disability Services will send the student the "General Guidelines for Documentation of a Disability." (A previously enrolled student who acquires or discovers that he/she has a disability also may submit documentation to the Director of Disability Services.)

After reviewing the documentation and, if necessary, consulting with the Disability Review Board, the Director will send the student a letter concerning his/her accommodation(s) request within two weeks of receipt of the documentation. The Director makes every effort to provide reasonable accommodations.

For further clarification about the policy for students with disabilities, please contact the Director of Disability Services.

Learning Services

Learning Services helps students maximize their potential for learning by providing academic support services and resources.

Professional staff members provide students with one-on-one help with time management, reading, note taking, test taking, study strategies, assistive technology, learning styles and learning environments. Student tutors – who are recommended by their professors – are trained to help peers with course work and study strategies. Student writing consultants, representing a variety of majors, can provide feedback on any stage of the writing process.

Campus Wellness Network

Elizabethtown College's Campus Wellness Network is an effective student support system that seeks to proactively identify and aid at-risk students. Comprised of faculty and staff, the Campus Wellness Network bridges academic and co-curricular aspects of college life at Elizabethtown to take a more holistic approach to student success.

Any member of the campus community may refer a student who he/she believes is experiencing difficulty in or out of the classroom to the Campus Wellness Network. Once identified, the Network will formulate an appropriate course of intervention that will suggest choices and options that the at-risk student may not have recognized. Through interventions, students receive the support they need and learn valuable skills that benefit them not only during their college career, but throughout their lives.

Center for Student Involvement

Through the activities of the Center for Student Involvement, Elizabethtown College students are offered productive and engaging programming that allows them to connect with the campus community, to get involved, and to build lasting memories of their college experience. This Center also provides opportunity, direction and support for tomorrow's leaders as they develop the skills that will benefit them for a lifetime.

Through the Center, three professional offices – the Office of the Chaplain and Religious Life, the Office of Student Activities, and the Office of Diversity – provide a variety of programs and services.

Additionally, five student organizations also join in enhancing campus life by planning unique events and offering services to Elizabethtown students. These organizations include Students Working to Entertain E-Town (S.W.E.E.T.), which plans and coordinates special events; The Etownian, our student-run newspaper; the Conestogan, the College yearbook; Campus Residence Association (CRA), which provides programming and educational services in the College's residence halls; and Student Senate, the student governing body.

Office of the Chaplain and Religious Life

The Office of the Chaplain and Religious Life strives to create a vital and vibrant atmosphere for spiritual growth and religious exploration. Each year, the office sponsors Soul Café, Interdenominational Christian Worship, faith-based comedians and concerts, interfaith prayer services and the "Religion Matters" newsletter, which deals with current issues in the world's religions.

The Chaplain is available to Elizabethtown students for spiritual mentoring, pastoral counseling and vocational exploration. Religious life on campus also includes ministries from various denominations and organizations, including Catholic Campus Ministry, Campus Crusade for Christ, InterVarsity Christian Fellowship, and Coalition for Christian Outreach (Jericho Road). In addition, several student religious clubs are active on campus, including the Hillel Club, the Lutheran Student Movement, the Brethren Student Group, and the Newman Club.

Office of Student Activities

The Office of Student Activities serves as the primary resource to the College's more than 80 Student Groups that are striving to enhance their individual contributions to the College community. Additionally, this Office works with students to make their individual contributions most purposeful in preparing them to be the leaders of the College community, as well as the global community. Through the programming of College traditions – such as Student Involvement Fairs, Family Weekend and Thank Goodness It's Spring Weekend – the Office of Student Activities strives to create an environment that calls for participation and involvement in the campus community.

Office of Diversity

The Office of Diversity seeks to create an inclusive environment that examines, recognizes and affirms human differences and similarities. Diversity is defined and related to national origin, religion, gender, disability, race/ethnicity, sexual orientation, age and socio-economic status. The team works with faculty, staff and administrators to develop strategic initiatives to create a more diverse campus. Each year, the Office sponsors a variety of academic, cultural, leadership and social programs to help students of diverse backgrounds achieve their goals.

Unique Centers of Learning

The Center for Global Citizenship

The Young Center for Anabaptist and Pietist Studies

The Edward R. Murphy Center for Continuing Education and Distance Learning

The Center for Excellence in Teaching and Learning

Unique Centers of Learning

Four centers of learning at Elizabethtown College – the Center for Global Citizenship, the Young Center for Anabaptist and Pietist Studies, the Edward R. Murphy Center for Continuing Education and Distance Learning, and the Center for Excellence in Teaching and Learning – add depth and uniqueness to our academic program and broaden the institution's appeal to a wider audience.

The Center for Global Citizenship provides a variety of opportunities for our traditional undergraduate and graduate students both in and out of the classroom, at home and abroad. The Center for Excellence in Teaching and Learning is a resource center and educational forum for developing new modes of learning for our students. The Young Center peripherally touches our traditional students through the speakers it hosts, the resources it brings to our classrooms, and the lectures it offers on our campus. The Edward R. Murphy Center for Continuing Education and Distance Learning further enriches the campus by bringing adult learners from the community to the campus to experience and participate in the academic excellence of the College.

The Center for Global Citizenship

Elizabethtown's Center for Global Citizenship creates opportunities for our students to explore their role as citizens of the world. The Center brings together under one umbrella three distinctive facets of the Elizabethtown heritage: a tradition of peacemaking, a commitment to educating for service, and a robust offering of international programs.

The College's approach to global citizenship is distinctive – owing to our particular mission and heritage. In keeping with the Brethren faith of our founders, Elizabethtown's mission declares that "the College affirms the values of peace, non-violence, human dignity and social justice and seeks to make those values manifest in the global community," consistent with our motto to "Educate for Service."

International Programs

Elizabethtown's array of international program offerings encourages and facilitates study-abroad experiences for our U.S. students and provides a support network for international students who elect to study here. Increasing numbers of our U.S. students are participating in the semester-long, study-abroad opportunities offered at our five partner institutions, which include BCA Study Abroad; Nihon University in Tokyo, Japan; Queen's University – Herstmonceux Castle in the United Kingdom; AustraLearn; and The School for Field Studies. More information on applying to participate in study-abroad programs is found in the Academic Policies chapter of this Catalog.

Also, to make international study more accessible, several Elizabethtown faculty members regularly lead short-term educational experiences to locations around the world. These programs typically provide credits to students who successfully complete all the requirements. In past years, faculty-led, short-term programs have gone to China, Costa Rica, the Czech Republic, Ecuador, England, France, Ireland, Japan, Thailand and Vietnam. Other programs are being developed to take students to Italy, Germany, Switzerland and other locations. More information on those programs for which our students can earn credit is contained in the Programs and Courses chapter of this Catalog.

BCA Study Abroad

BCA Study Abroad – Elizabethtown College's longtime partner – provides study-abroad programs at 18 locations worldwide for students, faculty and administrators. Rooted in the values of peace and justice, BCA Study Abroad promotes international understanding, awareness of global citizenship, and academic scholarship through educational exchange. A testimony to its strong ties to Elizabethtown, BCA Study Abroad relocated its headquarters to the College's campus in July 2002.

Language-Intensive Programs. For students required to pursue a language-intensive program, the following locations are foreign language intensive: Philipps University of Marburg in Germany; the University of Barcelona in Spain; the University of San Francisco in Quito, Ecuador; the University of Strasbourg in France; and the University of Veracruz in Xalapa, Mexico. Students participating in these programs must receive intensive language instruction prior to their study-abroad experience.

English-Speaking Programs. Several programs are available where proficiency with a second language is not a requirement. For a current listing of locations, please see www.bcaabroad.com.

Nihon University, Tokyo, Japan

Formalized with the assistance of 1967 Elizabethtown graduate and trustee Kyoko Utsumi Akanoma, the 1999 agreement between Elizabethtown College and Nihon University, Japan's largest private university, provides exchange opportunities for Elizabethtown's Japanese majors. Additionally, faculty-led, short-term summer programs are available to all of the College's majors. More information about Nihon can be found at www.nihon-u.ac.jp/intldiv/jlsp/jlsp.html.

Each year, a number of qualified students are invited to participate in the Intensive Japanese Language Program (IJLP) during the fall and spring semesters. Students enrolled in the program will undergo intensive Japanese language instruction and will study Japanese culture and history.

Queen's University, Herstmonceux Castle, United Kingdom

Elizabethtown College affiliates with the Queen's University (Canada) International Study Centre at Herstmonceux Castle in East Sussex, England. The Castle – one of England's most significant and beautiful brick buildings – was originally constructed during the 1440s. It is located on more than 500 acres of land in the southeast corner of England, only 80 minutes from London.

During programs lasting a summer or one or two semesters, enrolled students are exposed to the European experience while studying in English and receiving credits compatible with the Elizabethtown curriculum. Additionally, Elizabethtown faculty also are able to teach abroad at Herstmonceux. Most courses taught at this location focus on international business, arts and humanities, and European studies and cover such areas as art, commerce, geography, history, politics, law, languages and literature. The programs anchor the academic experience in direct observation and field study. More information can be found at www.queensu.ca/isc.

AustraLearn: Study in Australia, New Zealand and the South Pacific

Elizabethtown College also affiliates with AustraLearn, a U.S.-based study-abroad provider that prides itself on cultural integration and offers high-quality, unique experiences in Australia, New Zealand and the South Pacific. Now in its 18th year of service to students, AustraLearn boasts short-term experiences in January and during summer, semester-long, and year-long opportunities that include renowned orientation, excursion and volunteer programs. Elizabethtown students may choose to study at one of the following AustraLearn locations: Queensland University of Technology or the University of Queensland, both located in Brisbane, Queensland, Australia; University of Newcastle, New South Wales, Australia; or University of Waikato in Hamilton, New Zealand. Each of these institutions – which routinely cater to the needs of international students – provides an exceptional program that is strategically located near cultural and scenic centers. As all four universities are English-speaking, these international experiences are accessible to all Elizabethtown students. AutraLearn also provides short-term summer programs and internships. More information can be found at www.australearn.org/.

The School for Field Studies (SFS)

Elizabethtown College's most recent partner in international study, the School for Field Studies, provides dynamic, hands-on experiences for students at five field stations located throughout the world. Utilizing an interdisciplinary approach, SFS engages students in high-quality field research and academic study at research stations in Australia (Rainforest Studies), Costa Rica (Sustainable Development Studies), Kenya (Wildlife Management Studies), Mexico (Coastal Studies), and Turks and Caicos Islands (Marine Resource Management Studies). Students from

all disciplines are encouraged to apply, especially those majoring in biology, environmental science, pre-medicine and pre-forestry. More information can be found at www.fieldstudies.org/.

Other Approved Programs

Many Elizabethtown College students choose to study abroad through approved, non-affiliated programs, such as the Institute for the International Education of Students (IES), Cultural Experiences Abroad (CEA), International Studies Abroad (ISA), the American Institute for Foreign Study (AIFS), Semester at Sea, Temple University and many others. Students who choose this option for semester programs remain registered at Elizabethtown, but pay the program provider directly. Institutional aid does not travel with the student, but federal and sometimes state aid does. Some students choose to take part in summer programs or work, volunteer, internship and service-learning opportunities overseas as well.

Academic Curricula

In addition to these study-abroad opportunities, the Center oversees interdisciplinary academic minors in International Studies and Asian Studies. Information regarding these programs can be found in the Interdisciplinary Programs section of this Catalog.

Service-Learning and Civic Engagement

Service is an important quality of an Elizabethtown education, one that we consider essential to a comprehensive college experience. The Center for Global Citizenship intentionally creates service-learning experiences to provide our students with an opportunity to more fully explore the meaning of our motto "Educate for Service" in today's increasingly global society.

Although our service begins at home, it certainly doesn't stop there. Individually and collectively, members of our community are reaching far beyond our campus boundaries to help those in need. From our annual "Into the Streets" campus-wide day of service to the frequent and focused efforts of our student clubs, service organizations and Student-Directed Learning Communities, service has become institutionalized at Elizabethtown College. Students, faculty and staff take part in annual trips to Mississippi, Florida and other areas in partnership with relief and development agencies. Service-learning also is being integrated into our classrooms through faculty-directed projects, urban service-learning experiences, and fieldwork. Service-learning is increasingly being integrated into international travel opportunities in places as far away as Ecuador and South Africa. And, under the leadership of the Center for Global Citizenship, the entire College community joins together to serve when catastrophic natural events devastate regions worldwide.

All of these efforts are the result of our belief that we have an obligation to use our knowledge to aid those in need, whether they live right around the corner or halfway around the world. And, through these experiences, our students also benefit, because their understanding of the global community is broadened and their knowledge of their chosen discipline is enhanced.

Peacemaking

Over the century since members of the Church of the Brethren founded Elizabethtown, our understanding of the College's peace legacy has evolved within the context of world events and the shifting views of our community. Although much has changed about the College, today's Elizabethtown continues to affirm the values of peace, non-violence, human dignity and social justice and seeks to make those values manifest in the global community. One way the Center does so is by offering a Peace and Conflict Studies minor, which is discussed in the Interdisciplinary Programs chapter of this Catalog.

Also reflective of that mission, the Center for Global Citizenship includes peacemaking as one of its three areas of focus. As a result of efforts by our faculty leaders in this area, Elizabethtown is creating opportunities to build the community of moral discourse necessary to allow our students to learn about and discuss issues related to the College's moral values. This discussion grows into action that creates peace, affirms human dignity, and works for social justice in Elizabethtown and the wider world.

Every year, the Center organizes a variety of trips, activities, lectures and events to enable students to more fully explore the practice of and their commitment to peace. Since spring 2007, the Center has hosted the annual Ware Lecture on Peacemaking, a program that brings world-class speakers to campus to engage students, faculty and staff on issues of global peace and justice.

The Young Center for Anabaptist and Pietist Studies

An internationally recognized scholarly research institute, the Young Center for Anabaptist and Pietist Studies fosters contemporary and historical investigations of Anabaptism and Pietism, the theological traditions from which the Church of the Brethren developed. The Center seeks to interpret the cultural and religious heritage of groups emerging from these movements through exhibits, public lectures, workshops and conferences. The Center staff regularly teaches undergraduate courses at the College, offers occasional public lectures, and directs research projects.

The Center, which is named in honor of Galen S. and Jessie B. Young, overlooks Lake Placida on the east edge of Elizabethtown's campus and includes staff offices, a reading room, exhibit areas and a seminar room. The Bucher Meeting-house, which is named for long-time College trustee and Church of the Brethren minister Rufus P. Bucher, comprises one wing of the building. Its architectural

style is patterned after the first Brethren meetinghouse, which was built in 1770 in Germantown, Pa. In addition to serving as a site for Young Center events, the Bucher Meetinghouse is used for worship services, weddings, lectures, conferences, retreats and other campus and community activities.

Through its Fellows program, the Young Center supports junior and senior scholars and graduate students on leave from other institutions. Fellows spend a summer or semester on campus, using the extensive resources available in the region to work on their research topics.

The Young Center's regular activities include a spring and fall lecture series, an annual banquet, the Durnbaugh Lectures, and the Dale W. Brown Book Award, which is given annually for the outstanding book in Anabaptist and Pietist Studies. The Center also publishes a bi-annual newsletter and sponsors occasional summer conferences at the College.

For more information about the Young Center, please call (717) 361-1470 or visit www.etown.edu/youngctr.

Edward R. Murphy Center for Continuing Education and Distance Learning

As a distinct academic unit of Elizabethtown College empowered to meet the needs of adult learners, the Edward R. Murphy Center for Continuing Education and Distance Learning (CCEDL) offers a variety of learning programs for adults in the South Central Pennsylvania Region with courses available at the Elizabethtown Campus, in Harrisburg at the Dixon University Center, in Lancaster at College Square on Harrisburg Pike, and over the Internet.

The Center seeks to extend the boundaries of the College's learning community to include a wider and more diverse population. The Center expresses the values of the College's mission through a commitment to and advocacy of degree and non-degree academic programs for adult learners. In particular, the Center embraces the values of human dignity and social justice by widening access to quality higher education for adults. In its programs and outreach, the Center fosters a learner-centered academic culture that expresses the College's belief that learning is life-long and most noble when used to benefit others.

The Middle States Association of Colleges and Secondary Schools accredits CCEDL Programs. The Center has not sought accreditation through the Association of Collegiate Business Schools and Programs.

For more information or to obtain a copy of the CCEDL Catalog, please call (717) 361-1411 or visit www.etown.edu/cce.

Center for Excellence in Teaching and Learning

Elizabethtown College's Center for Excellence in Teaching and Learning (CETL) is dedicated to the development of the College's faculty and professional staff and the promotion of interdisciplinary dialogue and scholarship. Launched in 2007, CETL serves as a resource center and educational forum for developing new modes of learning for our students. The Center promotes the sharing of best practices in pedagogy, conducts professional development activities, and enhances the activities of other College centers and programs.

CETL also administers the College's Collaborative Scholarship Program, which offers financial support for interdisciplinary scholarship projects undertaken jointly by teams of faculty, students and professional staff. Through these grants, multidisciplinary teams create new or revised interdisciplinary courses, research opportunities, teaching innovations, articles and presentations for professional conferences.

Academic Program

Degrees Offered

The Core Program

Academic Majors and Minors

Elizabethtown College Honors Program

Program Variations and Options

Affiliated Institution Programs

International Programs

Academic Program

Degrees Offered

Elizabethtown College grants five residence degrees: Bachelor of Arts, Bachelor of Music, Bachelor of Science, Master of Arts, and Master of Science. Four additional degrees are offered through the Center of Continuing Education and Distance Learning: Bachelor of Liberal Studies, Bachelor of Professional Studies, Associate of Arts, and Associate of Science.

The Core Program

The Core Program supports the academic goals expressed in Elizabethtown College's mission statement. It has four major purposes: to provide a sense of mission and purpose to general education, to provide a foundation for successful study in liberal arts and professions, to integrate knowledge across the disciplines by engaging students in the study of the natural world and the human experience, and to develop habits of the mind that foster continued intellectual growth. The Core Program promotes truth, tenable judgments and important ideas by assuring that a student has the opportunity to acquire significant knowledge and accepted methods of inquiry.

The Core Program offers two basic categories of courses. Students engage in a common educational experience in the First-Year Seminar and First-Year Colloquium. In addition to this common experience, students enroll in courses in eight Areas of Understanding. A total of 11 courses – including the First-Year Seminar and Colloquium – are required to complete the Elizabethtown Core. The thematic Areas of Understanding unite the Core Program into a cohesive offering, develop skills of self-education, and integrate knowledge across the disciplines. Any exceptions to Core requirements must be petitioned to the Academic Standing Committee.

Courses in the Core Program are reviewed every three years, with approximately one-third of the courses undergoing review each year. Thus, the Core is fluid, with courses moving in and out. For the current list of approved Core courses, refer to the online list available through the Registration and Records website at www.etown.edu/registration.

Common Core

Students who are entering the College for the first time and who are pursuing a bachelor's degree must take a First-Year Seminar and the First-Year Colloquium during their first semester. Transfer students who have completed fewer than

24 credits of course work at another college also are required to complete a First-Year Seminar and the First-Year Colloquium.

FYS 100 First-Year Seminar (3 credits)
The First-Year Seminar is comprised of several important components. First, it develops intellectual skills, such as critical analysis and synthesis, and communications skills, such as speaking and writing. Second, it broadens definitions of learning. Students are exposed to multiple ways of acquiring information and knowledge. Third, using the instructor's major field of study as a foundation, the First-Year Seminar establishes the integration of knowledge and promotes connections across disciplines. The First-Year Seminar is letter-graded.

FYC 100 First-Year Colloquium (1 credit)
The First-Year Colloquium is the companion to the First-Year Seminar. It provides a common experience for all first-year students, who meet once a week during the fall semester either with their instructor or with the whole first-year class, depending on the particular program for that week. Programming is varied and includes academic lectures, performing arts presentations, and extended orientation programs that prepare the students for the expectations of college life and familiarize them with the support systems at Elizabethtown College. Students are required to provide evidence of reflection on all sessions (e.g., journaling). The First-Year Colloquium is graded Pass/No Pass.

Areas of Understanding

The Elizabethtown College Core Program consists of eight thematic Areas of Understanding (AU).

Power of Language (two courses)

Courses in this AU develop students' abilities to: 1) articulate ideas through extensive experience in the use of logic and rhetoric, that is, to write and speak logically, persuasively and creatively, as well as read carefully and critically; 2) analyze and synthesize new ideas; and 3) learn how language affects thinking and conceptual development.

One of the courses in this AU must be a writing-based English course (English 100) or, for advanced students who test accordingly, an upper-level course (English 150 or Philosophy 110). Students placed in English 100 successfully must complete English 100 for their Power of Language AU. Students who receive AP or transfer credit for English 100 or who enroll in English 100 cannot receive credit for English 150. The Power of Language – English course must be taken during the students' first year or prior to the start of their second year.

The second course in the Power of Language AU must be a Modern or Ancient Language course. Approved courses in this AU currently include courses in Chinese, French, German, Japanese, Spanish, Classical Greek, Koiné Greek, Biblical Hebrew and Sanskrit. Consult the online list of approved courses for the complete list of specific language courses.

Mathematics (one course)

This AU stresses competency in quantitative reasoning and mastery of problem-solving skills. Courses in Mathematical Analysis: 1) develop an awareness and appreciation for the cultural significance of mathematics, its contributions to the modern world, and its power in shaping current thought; 2) present concepts that encourage a sophisticated response to arguments and positions that depend on symbolic logic and/or numbers and statistics; 3) stress ways in which numerical data and/or symbolic interpretations increasingly make accessible more profound levels of knowledge and understanding; 4) develop the ability to model real-world phenomena logically and mathematically; and 5) develop problem-solving strategies.

Based upon mathematical and analytical skill level, new students are required to take either Mathematics 011 (a college mathematics preparatory course that does not count for Core or graduation credit) or a college-level mathematics course. Students with a placement of Mathematics 011 are required to complete this course prior to enrolling in a Mathematics Core course.

Creative Expression (one course or course equivalent)

Courses in this AU focus on and require creation or performance in an artistic medium. In doing so, courses in Creative Expression: 1) introduce students to basic concepts and vocabulary employed in the creation and analysis of like artworks and prepare them to make informed aesthetic judgments; 2) develop the awareness that creative art forms affirm our humanity by giving expression to our innermost feelings; and 3) help students to understand that an artistic medium has value.

If dance courses are selected to satisfy the Creative Expression Core requirement, two dance courses must be selected. Four credits in applied music lessons or in qualified music ensembles may be used to fulfill this requirement as long as the work is letter-graded. Refer to the online list of Core courses for music courses that are approved.

Western Cultural Heritage (one course)

Courses in this AU introduce students to Western cultural heritage through the critical analysis of significant human endeavors. Courses in this AU teach

students: 1) an important aspect of Western cultural heritage; 2) the complexity of the past and its relationship to the contemporary world; 3) that knowledge can be subject to a variety of interpretations; 4) to place the subject in its historical context; and 5) critical analysis of primary and/or secondary sources.

Non-Western Culture Heritage (one course)

Courses in this AU introduce students to non-Western cultural heritage through the critical analysis of significant human endeavors. Courses in this AU teach students: 1) an important aspect of non-Western cultural heritage; 2) the complexity of the past and its relationship to the contemporary world; 3) that knowledge can be subject to a variety of interpretations; 4) to place the subject in its historical context; and 5) critical analysis of primary and/or secondary sources.

Natural and Physical Sciences (two courses in different disciplines)

Courses in the Natural and Physical Sciences: 1) present major scientific concepts; 2) include appropriate background literature, data analysis and the multiple interpretations that may result and, if a laboratory course, also include data collection; and 3) develop understanding of the method of scientific inquiry, i.e., the relationship between hypotheses, experimentation, theories and laws. Students must complete at least one laboratory course to satisfy the Natural and Physical Sciences AU.

Social Sciences (one course)

Courses in this AU emphasize the ways in which human behavior is shaped, ranging from the formation of the self to the interaction of nations. Courses in the Social Sciences: 1) introduce major concepts, theories and texts that interpret and explain human behavior and interaction; 2) explore the diversity and/or integration of social worlds; 3) examine the organization and function of one or more social systems; 4) explore and analyze those influences that affect human thought, feelings and behaviors; and 5) introduce the methods and procedures of social research.

Humanities (one course)

Courses in this AU examine values by engaging students in the decision-making process and by encouraging them to consider the implications of their choices for self and society. Courses in the Humanities: 1) examine the nature and origin of one or more values that govern human conduct; 2) consider values in the context of fundamental human dilemmas; 3) introduce students to major works representing aesthetic, cultural, historical, religious or philosophical approaches to the understanding of values; 4) examine how an individual's values

and choices can be influenced by many factors; and 5) encourage students to make thoughtful decisions.

Additional Requirements and Policies

Students must take at least one Writing and Research Intensive (WRI) course beyond their Power of Language – English course. WRI courses can be in any AU other than Power of Language – English. Refer to the online list of Core courses for those designated as WRI.

Courses approved by Academic Council for the Core Program that also are required for a particular major or minor may be used to fulfill both requirements.

Seniors may enroll in Core Program courses to complete Core, major or minor requirements as needed. Seniors **may not** enroll in Core Program courses for elective purposes until all enrolled underclass students have had the opportunity to select courses during official registration periods in November and April. In this context, seniors include students of senior status and juniors who will achieve senior status at the completion of the current semester.

The Core Program may be satisfied in its entirety by transfer courses (i.e., there is no residency requirement for the Core).

Students can satisfy Core AU with transferred courses that are worth at least three credits.

Majors with more than 125 credits for graduation may be allowed to count two courses required of the major in lieu of two courses from the Core. Courses would have to meet the goals for the appropriate AU. Academic Departments may apply to the Core Committee and Academic Council to demonstrate how the major courses satisfy the goals of the AU.

When course requirements for an academic program meet the educational objectives for a Core AU, Academic Departments may apply to Academic Council for a waiver of that AU for students completing the program. The course requirements supporting the waiver must be an integral part of the academic program.

Students are required to complete the appropriate level of mathematics, English, and modern/ancient language courses as determined by the College. Once students have completed the appropriate level, they cannot receive credit for taking a lower-level course in the sequence.

First-Year Seminar and First-Year Colloquium may not be substituted for a major or minor course or to waive a requirement for the major or minor.

Academic Majors

The College offers degrees in the following academic majors, within which a number of options are available. The details of major requirements are included in the Programs and Courses chapter of this Catalog.

Accounting, B.S.
Actuarial Science, B.S.
Biochemistry, B.S.
Biology, B.S.
BioTechnology, B.S.
Business Administration, B.S.
Chemistry, B.S.
Communications, B.A.
Computer Engineering, B.S.
Computer Science, B.S.
Criminal Justice, B.A.
Economics, B.A.
Elementary Education, B.S.
Engineering 3+2, B.A., Engineering, B.S.
English, B.A.
Environmental Science, B.S.
Fine Art, B.A.
Forestry and Environmental Management, B.S.
French, B.A.
General Science Education, B.S.
German, B.A.
Health and Occupation, B.S.
History, B.A.
Industrial Engineering Management, B.S.
Information Systems, B.S.
International Business, B.S.
Japanese, B.A.
Mathematics, B.S.
Music, B.A.
Music Education, B.M.
Music Therapy, B.M.
Occupational Therapy, M.S.
Philosophy, B.A.
Physics, B.S.

Political Philosophy and Legal Studies, B.A.
Political Science, B.A.
Psychology, B.A.
Religious Studies, B.A.
Secondary Education, B.A., B.S.
Social Studies, B.S.
Social Work, B.A.
Sociology-Anthropology, B.A.
Spanish, B.A.
Theatre, B.A.

Academic Minors

Students may elect to pursue an academic minor in addition to their major. Minors allow the student to acquire depth of knowledge in an area of secondary interest outside the major. Program requirements for each minor can be found in the Programs and Courses or the Interdisciplinary Programs chapters of this Catalog. The College offers the following minors: Anabaptist and Pietist Studies, Anthropology, Art History, Asian Studies, Biochemistry, Biology, Business Administration, Chemistry, Child Psychology, Cognitive Neuroscience, Communications, Computer Science, Creative Writing, Economics, English Literature, English Professional Writing, French, General Psychology, General Science, German, History, Human Services, International Studies, Information Systems, Japanese, Mathematics, Music, Peace and Conflict Studies, Philosophy, Physics, Political Science, Religious Studies, Sociology, Spanish, Studio Art, Theatre, and Women and Gender Studies.

Elizabethtown College Honors Program

The Elizabethtown College Honors Program, established in 1999 and sponsored by The Hershey Company, reflects the College's commitment to providing hand-crafted learning opportunities for its students. In the case of the Honors Program, the focus of this hand-crafting is on students with excellent academic records, superior academic abilities, intellectual promise and demonstrated initiative. Consistent with the mission of the College, the Honors Program seeks to promote high standards of scholarship, leadership and service among those students selected for the program. Class size deliberately is kept small; no more than 15 students are enrolled in each course.

The opportunity to work closely with faculty mentors from the first year to the senior year is an explicit goal of everyone associated with the program. In order to foster even greater involvement between faculty scholars and Honors students, co-curricular activities are an integral part of the program. Events such as field trips to nearby cultural sites (Gettysburg, Philadelphia and Washington, D.C.) are

routine. In addition, international travel is both encouraged and facilitated. Semester-long, study-abroad opportunities are expected, but there also are opportunities for students to visit a foreign country in an annual inter-session trip (e.g., Austria, China, Costa Rica, Ecuador, England, Iceland and Ireland).

To facilitate such experiences, the Elizabethtown College Honors Program allows each qualified student to apply for an Academic Research Grant that can be used in support of these trips or to support senior thesis research. In order to help foster a deeper sense of community, study rooms, a reserved lounge and a computer lab are located in the Honors Center for Honors student use.

Participation Requirements

Students entering the Elizabethtown College Honors Program in their first academic year take a two-course sequence of an Honors First-Year Seminar and an Honors Interdisciplinary Seminar focusing primarily on critical thinking and foundational skills. In the sophomore/junior years, Honors students take two additional Honors courses from the College's Core Program or in majors, minors or electives. In the junior year, students complete the Honors Leadership course. The final capstone Honors experience is the completion of a Senior Honors Thesis. A total of 24 credits must be acquired in Honors courses in order to fulfill the requirements and graduate as a recognized Elizabethtown College Honors Scholar. In order to remain in good standing within the program, students must maintain a grade point average of 3.50 overall.

The following courses are required of all Honors students:

HON 301 Honors Thesis Preparation (1 credit; Pass/No Pass registration)
HON 302 Honors Seminar (1 credit; Pass/No Pass registration)
HON 370 Honors Leadership Development (4 credits; letter-graded)

Other Honors courses are listed within the course listings in the Programs and Courses chapter of this Catalog and are noted on course schedules with an "H" at the beginning of the course code and "HNR" at the beginning of the title.

Admissions Process

See the Admissions chapter of this Catalog for information about the admissions process for the Honors Program or contact the Director of the Elizabethtown College Honors Program.

Program Variations and Options

In addition to majors and minors, Elizabethtown College offers a number of alternative learning opportunities both on and off campus. On-campus study

includes special learning options that emphasize individual study and close work with a member of the faculty. Off-campus opportunities include internships or joint programs with academic institutions or clinical facilities.

Independent Study

Independent Study is a way for students to pursue individual investigation and/or reading in an area of special interest or to advance competencies in their major/minor area. Independent Study may not be a course that is offered in the College Catalog and is not used simply to assemble credits for graduation or to replace a course listed in the curriculum. Independent Study also may not be used toward Core Program requirements.

Independent Study is available to students with junior or senior status who have a minimum grade point average of 2.00. Students pursuing Independent Study can expect to do extensive research, reading, writing and/or creative work resulting in a major paper, presentation, work of art, or other project agreed upon by the supervising faculty member and the student.

The work is initiated by the student and progresses largely unsupervised. Independent Studies usually are registered for between one to four credits per study. Normally, a student may carry only one Independent Study at a time or two Independent Studies at the discretion of the Independent Study Committee. A maximum of 12 credits of Independent Study can be applied toward graduation.

Independent Study is not tied to the academic calendar (i.e., a project may be started or finished at any point). **The project must be submitted to the Independent Study Committee prior to the registration period for the semester during which the Independent Study will begin.** The registration period for fall semester is in April and the registration period for spring semester is in November. Following approval of the Independent Study Committee, the student must officially register the project with the Office of Registration and Records by the end of the first week of classes for the semester during which it will be completed (i.e., by the end of the "Add Period"). Forms are available in the Office of Registration and Records. Any requests for exceptions to the policy must be made to the Academic Standing Committee.

Directed Study

In contrast to Independent Study of a special topic, Directed Study is undertaken for a regular course in the curriculum that is not being offered in a given semester. This method of study should be used by the student who needs rather frequent conferences with the professor.

An additional surcharge is assessed for the full-time student who registers for Directed Study. Part-time students granted permission to register for a Directed Study course pay the same surcharge. Full-time undergraduate students whose course load exceeds 18 hours as a result of the Directed Study registration are charged the current part-time rate for tuition for those hours in excess of 18 plus the surcharge for all Directed Study credits. **Note: Students must register for Directed Studies prior to beginning course work and no later than the end of the first week of classes (i.e., during the official "add" period for the semester).** Registration forms are available in the Office of Registration and Records.

Tutorials

The Tutorial is used to register a course that is **not** offered in the Catalog. In this respect, it is different from a Directed Study, which is used to register a course that is in the Catalog but is not offered in a given semester. The Tutorial is also different from the Independent Study: With an Independent Study, students are responsible for proposing the content of the project (which is not in the Catalog) and then work largely independently on the project of their design. With a Tutorial, the faculty member is responsible for developing the content of the course and then works closely with the student to provide instruction in the topic. Tutorials must be registered during the regular course "add" period and are assigned a 379 course number. An additional surcharge of $150 per credit is assessed for the full-time student who registers for a Tutorial. Full-time undergraduate students whose course load exceeds 18 hours as a result of a Tutorial registration are charged the current part-time rate for tuition for those hours in excess of 18.

Internships

Elizabethtown College offers students the opportunity to use what they learn in the classroom in real-world settings through internships. Some Academic Departments offer internships for credit as part of approved academic programs. Other types of internships may be initiated by the individual student or be offered by other educational institutions, agencies, businesses or organizations. Academic credit or recognition for internships will be granted only with the prior approval of the appropriate faculty member and administrative officer.

Guidelines for internships are available from Academic Department offices or the Office of Registration and Records.

Affiliated Institution Programs

In Affiliated Institution Programs, students study at Elizabethtown College and at affiliated academic institutions or clinical facilities in the United States. The following programs are offered in conjunction with other academic institutions:

Forestry with Duke University. See the Interdisciplinary Programs chapter of this Catalog.

Pre-engineering with The Pennsylvania State University. See the description in the Department of Physics and Engineering listing in the Programs and Courses chapter of this Catalog.

Biology Health Professions and Pre-Allied Health with Thomas Jefferson University. See the Interdisciplinary Programs chapter of this Catalog.

Invasive Cardiovascular Technology with the Lancaster Institute for Health Education. See the description in the Department of Biology listing in the Programs and Courses chapter of this Catalog.

Washington Semester and World Capitals Program with American University. The Washington Semester provides an opportunity to study in Washington, D.C., and take advantage of the resources of the nation's capital. Students in the program work with the policymakers and business professionals who play a vital role in American government and culture. Full semester credit is earned by studying in one of 10 areas: American politics, international politics, peace and conflict resolution, economic policy, journalism, justice, international business and trade, international environment/development, public law, and transforming communities. All programs include internships, and several involve three weeks of study abroad. Students interested in the program should contact Dr. Fletcher McClellan in the Department of Political Science. Students participating in the program must acquire off-campus course approvals from the Office of Registration and Records.

The College also offers a number of majors in which work at affiliated clinical facilities constitutes an important part of the student's education. In music therapy, occupational therapy, social work and clinical laboratory sciences, students combine work at the College with first-hand experience in hospitals, clinics, social work and therapy programs. For detailed descriptions, see the listings in the Programs and Courses chapter of this Catalog.

International Programs

Elizabethtown's array of international program offerings encourages and facilitates study-abroad experiences for our U.S. students and provides a support network

for international students who elect to study here. Increasing numbers of our U.S. students are participating in the semester-long, study-abroad opportunities offered at our five partner institutions. More information about Elizabethtown's International Programs can be found in the Unique Centers of Learning chapter of this Catalog.

To make international study more accessible, several Elizabethtown faculty members regularly lead short-term educational experiences to locations around the world. These programs typically provide credits to students who successfully complete all the requirements. More information on those programs for which our students can earn credit is contained in the Programs and Courses chapter of this Catalog.

Programs and Courses

Biology
Business
Chemistry and Biochemistry
Communications
Computer Science
Education
English
Fine and Performing Arts
History
Mathematical Sciences
Modern Languages
Occupational Therapy
Philosophy
Physical Education and Health
Physics and Engineering
Political Science
Psychology
Religious Studies
Social Work
Sociology and Anthropology

Programs and Courses

The programs and courses offered by the College are arranged alphabetically by Department and then numerically by course code. More detailed course information may be found on Department websites and course syllabi. The High Library maintains a complete course syllabi file. Some majors and minors are sponsored by more than one academic discipline. These programs are listed alphabetically within the Interdisciplinary Programs chapter of the College Catalog, which follows the Department listings.

Department of Biology (B.S.)

Murray (Chair), Bowne, Bridge, Cavender, Coren, Thompson, Wohl, Yorty

The courses of the Department of Biology provide a foundation in basic concepts and principles involving the structural, functional and environmental aspects of the living world. The courses provide the student with a broad and unifying understanding of nature's life forms. The Department involves students in research studies with professors through independent study projects, internships and a senior seminar.

Majors Offered

The Biology Department offers majors in **Biology**, **BioTechnology** and **Environmental Science**. It also participates in cooperative programs with other institutions.

Bachelor of Science in Biology

This curriculum prepares students for the rigors of graduate school, professional schools of medicine and allied health, and biologically oriented employment opportunities. Four concentrations are available to students pursuing a Bachelor of Science in Biology: Biological Sciences, Premedicine, Allied Health and Secondary Education (Biology Education).

The **Biological Sciences concentration** prepares the student for a biologically related profession or for graduate school. The specific requirements are Biology 111, 112, 211, 324-324L, 412 and one course from Biology 313-313L or 317, and at least 15 credits from Biology 212-212L, 235, 310-310L, 311, 318, 322-322L, 331, 332, 336, 341, 347, 352-352L, 362. Other requirements are: Chemistry 105, 113, 114 (if a fourth chemistry course is required, choose from 214 or 242); Physics 103 or 200 (if second Physics course is required, choose from 104 or 201); and Mathematics 117, 121 or 251.

The **Premedicine concentration** prepares the student for entry into professional schools of medicine and related fields such as dentistry, osteopathic medicine, veterinary medicine, optometry and podiatric medicine. The specific requirements are Biology 111, 112, 211, 324-324L, 341, 412 and one course from Biology 313-313L or 317, and at least 11 credits from Biology 212-212L, 235, 310-310L, 311, 318, 322-322L, 331, 336, 347, 352-352L, 362. Other requirements are: Chemistry 105, 113, 114, 214 or 242; Physics 103 and 104 or Physics 200 and 201; and Mathematics 117, 121 or 251. Specific schools may require additional courses. For example, all pre-veterinary medicine students should schedule courses in biochemistry and microbiology. Students interested in the premedical program should consult the Chair of the Health Professions Advisory Committee. The Committee serves the following functions: 1) work jointly with premedical students and their major advisors to ensure that all prerequisites are met for entry into schools of medicine; 2) advise students on registration and preparation for medical school admissions tests; 3) assist students in the preparation and submission of applications to medical schools; 4) draft a composite letter of evaluation and endorsement for worthy candidates and forward this information to appropriate medical school admissions committees; 5) offer assistance in preparing for medical school interviews; 6) solicit and collect literature that will aid students to plan financially for their medical training; and 7) maintain statistics on medical school placement for advising and administrative purposes.

The **Allied Health concentration** prepares the student for entry into the professional allied health science programs of Thomas Jefferson University, Widener University, and, after three years, other accredited pre-approved programs.

Students interested in this program should consult Dr. Jonathon Coren and refer to the cooperative programs.

The **Secondary Education concentration** (Biology Education) prepares the student for receipt of Pennsylvania Secondary Education Certification within the framework of the biology major. This program provides a strong background in the biological sciences, while simultaneously fulfilling the requirements for secondary teaching certification. The specific requirements are Biology 111, 112, 211, 324 and 324L, and one course from Biology 313-313L or 317, and at least 11 credits from Biology 212-212L, 235, 311, 318, 322-322L, 335, 336, 341, 343, 347, 352-352L, 354-354L or 362. Other requirements are: Chemistry 105, 113, 114; Physics 103 or 200; two math courses (7 credits); one course in Earth Science; two courses in English (one literature and one writing) and Education 105, 150, 241, 282, 305, 470 and 490.

Students interested in this concentration should consult Dr. Thomas Murray.

Bachelor of Science in BioTechnology

The BioTechnology curriculum prepares students for biological research careers utilizing new methodologies of microbiology and cellular and molecular biology and provides an additional option of study for students wishing to enter graduate school. Emphasizing "problem-based learning," student internships and integration with the Core Curriculum, the major also provides a unique learning experience, stressing ethical use of technology, lifelong learning and development of leadership skills. The specific requirements are Biology 111, 112, 211, 212-212L, 235, 310-310L, 311, 324-324L, 412. Take one of Biology 474, 491 or 492 (A maximum of four credits can be applied to major. All additional credits will be considered free elective credits.); and at least seven credits from Biology electives and/or Chemistry 323. Other requirements are Chemistry 105, 113 and 114; Physics 103 or 200; and Mathematics 117, 121 or 251.

Students interested in the BioTechnology major should consult Dr. Jane Cavender.

Bachelor of Science in Environmental Science

The Environmental Science curriculum prepares students for entry-level positions with environmental firms, industry or government agencies that require knowledge of environmental principles and methodology, as well as for entry into graduate environmental programs. In addition to providing the student with a solid grounding in basic principles, they are exposed to the application of those principles in an intern program.

The universal requirements for the Environmental Science major are Biology 111, 112, 211, 313-313L, 317, and 412. Take one of Biology 472, 491, 492 or Political Science 471 (A maximum of four credits can be applied to major. All additional credits will be considered free elective credits.); and at least seven additional credits from Biology 235, 318, 324-324L, 331, 332, 347, or 362. Other requirements are Earth Science 114, Sociology 204, Philosophy 255D, Chemistry 105, 113, 114; Physics 103 or 200; and Mathematics 117, 121 or 251.

Students interested in Environmental Science should consult Dr. Thomas Murray.

Bachelor of Science: General Science Secondary Education

This curriculum prepares the student to receive secondary school general science certification. Students interested in this area should consult the detailed description in the Interdisciplinary Programs chapter of the College Catalog.

Further details may be obtained from Dr. Thomas Murray.

Cooperative Programs with Other Institutions

The Biology Department participates in several cooperative programs.

The **Pre-forestry program with Duke University's Nicholas School of the Environment and Earth Sciences** is a five-year program leading to a Bachelor of Science degree from Elizabethtown College and a Master of Forestry or Master of Environmental Management degree from Duke University. Students interested in this program should see the description in the Interdisciplinary Programs chapter of the College Catalog.

The **Cardiovascular Invasive Specialty program with Lancaster General College of Nursing and Health Sciences** (LGCNHS) leads to a Bachelor of Science degree in Biology from Elizabethtown College and a diploma in Cardiovascular Invasive Specialty from LGCNHS. In this program, the student spends the first three years at Elizabethtown College and attends LGCNHS during the fourth year. The program follows the three-year biology Allied Health curriculum that meets both the requirements of the Biology major as well as the Core Program of Elizabethtown College for a total of 94 credits. The fourth year meets the academic and clinical curriculum established by LGCNHS for its Cardiovascular Invasive Specialty program for a total of 64 credits, of which 31 will be transferred to Elizabethtown College.

Courses required at Elizabethtown College include Biology 111, 112, 211, 324-324L, 341 and one four-credit biology elective; Chemistry 105, 113 and 114; Physics 103; Mathematics 251; Computer Science 120; 44 credits of Core courses, 12 of which double count for science and mathematics requirements; and 15 credits of electives. Students interested in this major should consult Dr. Jonathon Coren.

In the **Pre-Allied Health program**, students spend the first two years at Elizabethtown College and then transfer to **Thomas Jefferson University or another degree-granting institution with an accredited program** for their junior and senior years. The professional programs include areas of biotechnology, molecular sciences, radiologic sciences and occupational therapy. Students should contact Dr. Jonathon Coren for specific Pre-Allied Health courses for each of these programs. These programs differ from the Biology major/Allied Health programs in that no degree is awarded from Elizabethtown College. Thomas Jefferson University awards the Bachelor of Science degree for the programs. Students who are interested in earning an Elizabethtown College degree must complete the Biology major and Elizabethtown's Core requirements. Students interested in this program should contact Dr. Jonathon Coren very early to design a specific program that meets the requirements of a degree-granting institution.

The **Cooperative Program in Graduate Studies with The Pennsylvania State University College of Medicine** allows selected undergraduate science majors to enroll in graduate classes at the Hershey Medical Center campus of The Pennsylvania State University. Criteria include successful completion of the required undergraduate courses, a grade point average of 3.50 or better, and permission of the Biology Internship Advisor. If a student possesses a grade point average of 3.00 to 3.49, admittance is possible with the consent of the Dean of the College of Medicine and the Internship Advisor. This unique educational opportunity allows students to gain exposure to graduate-level classes, while pursuing undergraduate studies at Elizabethtown College.

The **Cooperative 3+3 Program with Thomas Jefferson University and Widener University** leads to a Bachelor of Science degree from Elizabethtown College and a Doctor of Physical Therapy (DPT) degree from Thomas Jefferson University or Widener University. In these programs, students spend three years at Elizabethtown College fulfilling general education Core, the Pre-Physical Therapy curriculum and the requirements of the Biology major. If accepted by the cooperating institution, students spend three more years at Thomas Jefferson University or Widener University. Students may apply for acceptance into Widener University's 3+3 DPT program during the fall semester of their junior year as an undergraduate at Elizabethtown. Thomas Jefferson University's 3+3 DPT program accepts applications during the fall of the senior year of high school or during the first year at Elizabethtown College. Interested students should consult with Dr. Jonathon Coren before organizing their first-year fall class schedule as this program has specific additional requirements. After completing four years – three at Elizabethtown and one at the cooperative school – and acquiring at least 125 credits, the student is awarded a Bachelor of Science degree in Biology from Elizabethtown College. After the student fulfills the remainder of the professional upper division program of clinical experience, the cooperative institution awards the Doctor of Physical Therapy degree. The Biology Department requirements are: Biology 111, 112, 201, 202, 211 and one Biology elective; Chemistry 105, 113, 114; Physics 103, 104; Mathematics 251 and 110, 117 or 121; and Psychology 105 and 221 or 225. Students who elect to remain at Elizabethtown College for their senior year also are required to take: Biology 313-313L or 317; Biology 412, and two additional biology electives.

Cooperative programs are offered with Thomas Jefferson University in other Allied Health areas, including cardiovascular technology, cytotechnology, cytogenetics technology, diagnostic imaging, laboratory sciences, nursing and occupational therapy. Students are not limited to the cooperative schools. Other allied health programs at other institutions of higher education may be used by the student to transfer credits back to Elizabethtown College. However, these programs need to be approved by the Biology Department and by the Registrar prior to the transfer of credit. All Allied Health majors should consult closely with Dr. Jonathon Coren to ensure that courses being taken fulfill other specific requirements of the institution to which the student plans to transfer.

Through an agreement with **The Pennsylvania State University College of Medicine**, select students may be admitted to Penn State's **Premedical Primary Care Program**, allowing them to pursue careers as primary care physicians. This program gives these students the option for automatic matriculation to The Pennsylvania State University College of Medicine upon completing the Bachelor of Science degree requirements. For acceptance criteria, contact the Health Professions Advisory Committee of Elizabethtown College.

Elizabethtown College is one of a select group of colleges that participates in **The Pennsylvania State University College of Medicine's Primary Care Pre-Admissions Program** at the Milton S. Hershey Medical Center. The program was established to encourage undergraduate students to pursue careers in internal medicine, family practice and pediatrics by providing students with mentoring, primary care and pre-clinical experience. Specifically, The Pennsylvania State University College of Medicine offers the following: a) a Primary Scholars Program, in which students spend two weeks at Hershey participating in lectures, seminars and clinical experiences; b) a Primary Care Early Acceptance and Admissions Program, through which students can apply for admission to The Pennsylvania State University College of Medicine at the end of their sophomore year of college; c) a Primary Care Summer Academic Program for minority students and students from rural and medically underserved areas; and d) a Primary Care Mentoring Program, through which students are assigned a mentor, a preceptor or faculty affiliate of The Pennsylvania State University College of Medicine, who is located in the same town or region as the student. To apply for acceptance into programs, students must meet criteria established by The Pennsylvania State University College of Medicine and apply through the Health Professions Advisory Committee at Elizabethtown College.

Through an articulation agreement with the **Philadelphia College of Osteopathic Medicine** (PCOM), qualified Elizabethtown College students can be admitted to PCOM's **Doctor of Osteopathic Medicine Program** provided they successfully have completed their undergraduate prerequisites for medical school at Elizabethtown College and fulfilled the admission requirements for PCOM. For program information and admissions requirements, contact the Department of Biology.

Through an articulation agreement with **Temple University's School of Dentistry**, qualified students can pursue a 3+4 program leading to a bachelor's degree from Elizabethtown and a **Doctor of Dental Medicine (DMD) degree** from Temple. While at Elizabethtown, students must complete at least one year of English, one year of biology, one year of organic chemistry, one year of inorganic chemistry, and one year of physics. For program information and admissions requirements, contact the Department of Biology.

Minors Offered

A **Biology minor** provides course options from which a student can gain an overall view of the discipline of biology. The specific requirements are Biology 111 and 112, or two courses from Biology 101, 102 or 103 and three additional courses in biology – excluding courses with a credit value of 0, 1 or 2. The total number of credits will be 18 or 20, depending on course selection. To aid in course selection and career counseling, Dr. Diane Bridge of the Biology Department will work with the student and the student's major advisor.

Honors in the Discipline

The Department of Biology participates in the College Honors in the Discipline Program. For guidelines, students should consult the Department Chair.

Biology Courses

101 NPS Biological Concepts
4.00 credits. **(Natural and Physical Science Core Course)** Designed for non-biology majors. An overview of the major biological concepts and ideas emphasizing their relevance to our daily lives, the course is designed to stimulate discussion of current biological issues and is intended to provide an understanding and respect for the basic mechanisms of life. Hours: lecture 3, laboratory 3.
**Students who have taken Biology 110 or 111 may not take this course.*

102 NPS Human Heredity and Inherited Diseases
4.00 credits. **(Natural and Physical Science Core Course)** An overview of human heredity, providing the tools needed to make informed decisions on a variety of health-related issues with information on disease, medical technology, genetic engineering and biotechnology, and environmental factors affecting human health. As part of the laboratory, each student isolates copies of a small portion of his or her own mitochondrial DNA. Students work with international DNA databases to compare their DNA sequences to those from their classmates, from people around the world, and from ancient Neanderthal DNA, allowing them to observe evolution in a very personal way. Hours: lecture 3, laboratory 3.

103 NPS Living with the Environment
4.00 credits. **(Natural and Physical Science Core Course)** A lecture/laboratory course designed for non-science majors. Principles of environmental relationships and how living organisms play a role in those relationships and respond to changes in their environment are emphasized. Current problems with pollution, hazardous wastes, energy and population growth are examined in relation to those environmental principles. Hours: lecture 3, laboratory 3.

111 Introduction to Biological Sciences I
4.00 credits. The study of the chemical and cellular basis of life, human and animal anatomy and physiology, cellular reproduction, heredity and animal development. For Biology majors and those students taking additional biology courses. This course fulfills one of the Natural and Physical Sciences Core requirements for Biology majors. Hours: lecture 3, laboratory 3. **This course may not be taken for credit after completing BIO 101 without permission of the Department Chair.* Fall semester.

112 Introduction to Biological Sciences II
4.00 credits. The evolution and diversity of organisms is examined by comparing representative forms of the five kingdoms and viruses. Discussion of plant structure and function and ecological principles is included. For Biology majors or those taking additional biology courses. Hours: lecture 3, laboratory 3. **Prerequisite: BIO 111 or permission of instructor.* Spring semester.

201 Human Anatomy and Physiology I
4.00 credits. The study of structure and function of the human integumentary, skeletal, muscular, nervous and endocrine systems. Particular attention is given to structure and function as it relates to dysfunction and disease. Laboratory work involves dissection of a human cadaver. Enrollment limited to occupational therapy, music therapy and allied health majors. Hours: lecture 3, laboratory 3. **Prerequisite: BIO 101 or 111 or permission of instructor.* Fall semester.

202 Human Anatomy and Physiology II
4.00 credits. A continuation of Biology 201. The study of structure and function of the human circulatory, respiratory, excretory, digestive and reproductive systems. Emphasis on these systems as they relate to homeostasis and disease. Laboratory work involves cat dissection and "hands-on" manipulation of instruments useful to the health profession student. Enrollment limited to occupational therapy, music therapy and allied health majors. Hours: lecture 3, laboratory 3. **Prerequisite: BIO 201.* Spring semester.

211 Genetics
4.00 credits. An integrated and comprehensive review of classical, neo-Mendelian principles of heredity and molecular biology. Laboratory work involves Drosophila crosses and basic techniques employed for molecular investigations. Hours: lecture 3, laboratory 3. **Prerequisite: BIO 112 or permission of instructor.* Fall semester.

212 Cell Biology
3.00 credits. Study of the cell from a molecular perspective and integrated approach. Morphological and physiological study of cells, cell mechanisms, and cell organelles are explained through understanding the interaction of biological molecules. Laboratory involves qualitative and quantitative investigations of cellular and molecular construction of enzymatic pathways through various

extraction and analysis techniques. Hours: lecture 3, laboratory 3. **Prerequisite: BIO 211 or permission of instructor.* Spring semester.

212L Cell Biology Laboratory
1.00 credit. Required for the BioTechnology major. The laboratory exercises demonstrate many of the important cell biology principles covered in the lecture course (Biology 212). Spring semester. Register by Instructor.

235 General Microbiology
4.00 credits. A study of the morphological, physiological and ecological characteristics of bacteria, as well as disease transmission and principles of control. A laboratory gives practice in the isolation and identification of bacteria. Hours: lecture 3, laboratory 4. **Prerequisites: BIO 112 and CH 105 or 114, or permission of instructor.* Spring semester. Register by Instructor.

310 Molecular Biology
3.00 credits. An upper-level course stressing study of current developments in molecular biology. Particular emphasis will be placed upon the theory of investigative molecular techniques. Hours: 3. **Prerequisite: BIO 111.* Fall semester.

310L Molecular Biology Laboratory
1.00 credit. The molecular biology laboratory experiments offer hands-on experience with the modern techniques of molecular biology. Students become proficient in the techniques of cloning, agarose gel electrophoresis, polymerase chain reaction and DNA mutagenesis. Laboratory report writing skills are emphasized. **Prerequisite: BIO 111. Corequisite: BIO 310.* Fall semester.

311 Experimental Design in Cell Biology
4.00 credits. A practical and theoretical examination of current techniques employed to study cellular biology. Proficiencies in experimental design, data collection, data analysis, and critical review of current literature are developed. Mammalian and plant tissue culture techniques, immunohistochemistry, ELISA, polyacrylamide and capillary electrophoresis, western analysis, and cellular apoptosis assessed by electron microscopy are emphasized. **Prerequisites: 15 credit hours of biology, including BIO 212, and 8 credit hours of chemistry.* Fall semester.

313 General Ecology
3.00 credits. The relationships between plants, animals and their environment are investigated with regard to energy flow, mineral cycling, physical and chemical parameters, population changes and community structure. Hours: 3. **Prerequisites: 16 credit hours of biology or permission of instructor.* Fall semester. Register by Instructor.

313L General Ecology Laboratory
1.00 credit. Use of techniques and instrumentation for aquatic and terrestrial field

studies, experimentation in such areas as population growth, competition, productivity and mineral cycling. Hours: 4. **Prerequisite or corequisite: BIO 313*. Fall semester. Register by Instructor.

317 Aquatic Ecology
4.00 credits. The study of physical, chemical and biological relationships in aquatic ecosystems as they relate to the survival and growth of organisms. The course will include laboratory and field experimentation using local aquatic ecosystems. Hours: lecture 3, laboratory 4. **Prerequisites: 15 credit hours of biology and 8 credit hours of chemistry*. Fall semester. Register by Instructor.

318 Marine Biology
3.00 credits. A study of the chemical and physical characteristics of marine ecosystems and the functional adaptations of marine organisms to those systems. Representative marine communities including rocky intertidal and coral reefs are examined in detail. The impacts of humans on marine environments also are discussed. Hours: 3. **Prerequisites: 8 credit hours of biology and 4 credit hours of chemistry*. Spring semester, alternate years.

322 Immunology
3.00 credits. A basic course encompassing immunity, serology, immunochemistry and immunobiology. Considered are antigenic specificity, humoral and cellular effector mechanisms, hypersensitivities, immunogenetics, tolerance and enhancement, tissue and tumor immunity, as well as recent methodological advances. Hours: 3. **Prerequisite: BIO 112 or permission of instructor*. Spring semester.

322L Immunology Laboratory
1.00 credit. The immunology laboratory experiments demonstrate many of the research methods currently utilized for studying immunology. This includes ELISA, flow cytometry, cell culture and cellular cytotoxicity assays. Emphasis is place upon assessing cellular and humoral effector mechanisms *in vivo* experimentation. **Prerequisite: BIO 112 or permission of the instructor. Corequisite: BIO 322*. Spring semester.

324 General Physiology
3.00 credits. A functional study of vertebrate organs and organ systems. Attention focused on similarities and specialization in relation to function, with emphasis on functional adaptations to the environment. Hours: 3. **Prerequisite: BIO 112 or permission of instructor*. Spring semester.

324L General Physiology Laboratory
1.00 credit. An investigation of selected physiological mechanisms, employing spectrophotometers, datagraphs, spirometers, oscilloscopes, electrocardiographs, electrophoresis and animal surgical techniques. Hours: 4. **Prerequisite or corequisite: BIO 324*. Spring semester.

331 Comparative Plant Morphology
4.00 credits. A comparative study of the plant kingdom with emphasis upon the various levels of organization, structure and the development and relationships of the major plant groups. Hours: lecture 3, laboratory 4. **Prerequisite: BIO 112*. Fall semester. Register by Instructor.

332 Taxonomy of Vascular Plants
4.00 credits. Examination of family characteristics useful in plant identification, using live material and transparencies. Taxonomic principles and distribution of plants discussed. Plant collection and some Saturday trips required. Hours: lecture 3, laboratory 4. **Prerequisite: BIO 112*. Spring semester. Register by Instructor.

335 Microbial Ecology and Diversity
4.00 credits. An intensive look at the physiology of microorganisms and how microbial metabolism plays a role in the cycling of nutrients in nature. Students will be exposed to the techniques commonly used to study microorganisms in their natural environment. The concepts of using microorganisms for bioremediation also will be discussed. Hours: lecture 3, laboratory 4. **Prerequisite: BIO 235 or permission of instructor*. Fall semester, alternate years.

336 Pathogenic Microbiology
4.00 credits. An intensive study of the disease-causing microorganisms of humans. The pathogenesis of and how the body defends itself against bacteria and viruses also will be examined. The concepts of the human immune system and its role in disease prevention and recovery is discussed. The laboratory exposes students to the techniques commonly used to study microorganisms in a clinical setting. Hours: lecture 3, laboratory 4. **Prerequisite: BIO 235 or permission of instructor*. Fall semester, alternate years.

341 Comparative Anatomy
4.00 credits. A comparative and embryological study of morphology of selected representatives from the *phylum chordata*. Laboratory work involves dissection and demonstration of organisms from major chordate groups. Hours: lecture 2, laboratory 4. **Prerequisite: BIO 112*. Fall semester.

343 Histology and Biomedical Technology
4.00 credits. A basic microscopic study of vertebrate tissues. The laboratory includes biomedical techniques of paraffin sectioning, staining and slide preparation. Hours: lecture 2, laboratory 4. **Prerequisite: BIO 112*. Spring semester.

347 Invertebrate Zoology
4.00 credits. A study of the evolution of invertebrate animals from simple to complex forms, structural and functional similarities and differences, and the evolutionary trends necessary for an understanding of basic adaptive features.

Hours: lecture 3, laboratory 3. **Prerequisite: BIO 112 or permission of instructor*. Fall semester, alternate years.

352 Developmental Biology
3.00 credits. A study of how differential gene expression, physical properties of cells, and signaling between cells contribute to development from a fertilized egg into a complex adult animal. Changes in development underlying evolutionary changes in animal form and effects of pollutants and other environmental factors on development are discussed. Hours: 3. **Prerequisite: BIO 211.* Fall semester, alternate years.

352L Developmental Biology Laboratory
1.00 credit. Techniques such as grafting tissue and staining with vital dyes and antibodies are used. Experiments address questions about cell-cell signaling, differentiation, evolution of gene families, regeneration, and effects of UV radiation and pesticides on early vertebrate development. Hours: 3. **Prerequisite or corequisite: BIO 352.* Fall semester, alternate years.

354 Molecular Evolution
3.00 credits. Basic principles of evolutionary biology, together with their application to explain organismal properties at all levels, from DNA to behavior are covered, with emphasis on DNA and protein evolution. Hours: 3. **Prerequisite: BIO 211.* Fall semester, alternate years.

354L Molecular Evolution Laboratory
1.00 credit. Experience with a variety of techniques important in the study of evolution at the molecular level, including extraction of DNA and RNA from diverse tissue types, PCR, cloning, and use of sequence databases and DNA analysis programs to identify cloned sequence. Hours: 3. **Prerequisite: BIO 211.* Fall semester, alternate years.

362 Ecotoxicology
4.00 credits. The study of the fate and transport of toxic compounds in the environment. The toxicity of individual pollutants at the organismal, species, population and community levels is discussed. Risk assessment and risk management in ecological systems also are discussed. The course includes laboratory experimentation. Hours: lecture 3, laboratory 4. **Prerequisites: 15 credit hours of biology and 8 credit hours of chemistry.* Spring semester, alternate years.

370-378 Special Topics in Biology
Variable credit. Courses of a specialized nature reflecting the interests of students and instructor. Courses are offered on a random basis.

412 Seminar in Biology
1.00 credit. Students will read and discuss articles in the biological literature dealing

with major advances in biology. A paper and oral presentation on a subject related to the discussion is required. **Prerequisite: senior standing.* Spring semester. Register by Instructor.

472 Internship in Environmental Science
3.00 credits. Work experience in an environmental science-related field, including environmental consulting and engineering firms, analytical laboratories and state agencies. Graded Pass/No Pass. **Prerequisite: at least junior standing.* Register by Instructor.

474 Internship in Biological Sciences
3.00 credits. Work experience in a biological science-related field, including biotechnology, pharmaceuticals, health care, analytical laboratories and state agencies. Graded Pass/No Pass. **Prerequisite: at least junior standing.* Register by Instructor.

480-489 Independent Study in Biology
Variable credit. Opportunity for advanced students to engage in independent study on a topic of choice. **Prerequisite: approval of Department Chair and Independent Study Committee.* Register by Instructor.

491 Research in Biology
Variable credit. An original research investigation planned and performed by students in consultation with faculty. A paper is written and major findings are presented orally to faculty and peers. Students must obtain permission of the professor who they wish to serve as their research mentor before enrolling in the course. Only one course may be used as a biology elective. Required for Honors in Biology. **Prerequisite: at least junior standing.* Graded Pass/No Pass. Fall semester. Register by Instructor.

492 Research in Biology
Variable credit. An original research investigation planned and performed by students in consultation with faculty. Students must obtain permission of the professor who they wish to serve as their research mentor before enrolling in the course. A maximum of 4 credits of research may be used as a biology elective. One four-credit research experience is required for Honors in Biology. **Prerequisite: at least a junior standing.* Graded Pass/No Pass. Spring Semester. Register by Instructor.

Department of Business (B.A., B.S.)

Paul (Chair), Chung (Associate Chair), Ciocirlan, Greenberg, Melvin, Neuhauser, Rao, Riportella, Sadowski, Sandu, Scheiding, Varamini, Williams

Vision: As a Department of Business within a highly respected comprehensive college grounded in a strong liberal arts curriculum, we seek to be the premier business program in the mid-Atlantic region recognized for its distinctive programs and graduates with high ethical standards who are prepared to make substantial contributions to the global business community, to embark on challenging graduate and professional programs, and to understand the importance of using their knowledge, skills and resources to serve others.

Mission: The Department of Business provides undergraduate students with a solid foundation in modern business disciplines (and their accompanying applications) within a liberal arts context. A challenging academic environment in the Department facilitates the acquisition of knowledge, experience in application of theory, and ethical decision-making skills necessary for success in graduate and professional education, and leadership positions in the global business community, government and nonprofit organizations. This environment also provides a strong foundation for lifelong development of analytic, communication and leadership skills. Our mission is fostered and guided by a faculty committed to sound pedagogical practice, rigorous intellectual inquiry, and multi-faceted service to the College and wider community.

Professional Accreditation

Elizabethtown College, through its Department of Business, is nationally accredited by the Association of Collegiate Business Schools and Programs (ACBSP). This requires the Department of Business to adhere to strict standards of excellence and undergo peer review of our standards. Elizabethtown College's Center for Continuing Education and Distance Learning (CCEDL) is not accredited by ACBSP. **Therefore, students enrolled in majors/minors offered by the Department of Business are not permitted to count courses taken through CCEDL toward their degree requirements.**

Outcomes Assessment

The Department uses feedback from a variety of measures, including surveys of alumni, the Major Field Achievement Test in business, and surveys of business executives to gauge the effectiveness of its academic programs and institute curricular improvements. Data from these instruments is gathered and reviewed by the Department's Committee on Outcomes Assessment Review. Based upon this review, the Committee submits an annual report to the Department's faculty to

recommend any changes to the curriculum or program based on its analysis of the various measures.

The Department of Business provides comprehensive programs of professional education for students who wish to achieve responsible positions in private and public business organizations. The Department's goal is to provide students with an understanding of economic and business systems within the global economy and a multicultural society, and to provide them with a foundation for pursuing a career, graduate study and continuing self-education in a business area.

Majors Offered

The Department of Business offers majors in **Accounting**, **Business Administration**, **International Business** and **Economics**.

Bachelor of Science in Accounting

Preparation for entrance into the profession of accounting (public, private or government) requires a basic business core in addition to a proficiency in accounting. Because of the increased emphasis upon critical thinking, communication, technology and quantitative techniques by business, students are urged to elect additional courses that strengthen these skills areas.

Accounting Major

The **Accounting major** requires Accounting 101, 205, 206, 270, 301, 310, 405 and one 300- or 400-level accounting elective; Business Administration 101, 215, 248, 265, 325, 331, 495; Economics 101, 102; and Mathematics 251.

150-Hour Accounting Program

The American Institute of CPAs (AICPA) and a number of states have enacted legislation requiring individuals who sit for the CPA exam to complete 150 credits of course work. The Department of Business will advise motivated students to complete the additional credits within their four years at Elizabethtown through a combination of AP credits, additional semester courses, internships and/or summer courses. In addition, the Department has negotiated articulation agreements with Lehigh University, Loyola College (Maryland), Penn State Harrisburg, and Rutgers University (New Jersey). Students who meet the acceptance criteria can use these agreements to obtain a master's degree with one additional year of coursework at these institutions. As an alternative, students may choose to satisfy the 150-hour requirement through a fifth-year diploma program at Elizabethtown College. Under the program, students may elect to attend Elizabethtown for a fifth year after graduating with a bachelor's degree. During the fifth year, students take courses to satisfy the educational requirement of their respective states. Specific

course selections will vary depending on the requirements of each state. At the completion of study, students will receive a fifth-year diploma. For additional information contact Prof. Terrie Riportella, Director of the Accounting Program.

International Accounting

Students interested in international accounting can choose one of three options: 1) accounting major with a modern language minor; 2) accounting major with an international studies minor; or 3) international business major with an accounting concentration. A choice of option would not have to be made until the end of sophomore year. However, students should declare their interest in the international accounting program in their first year in order to fulfill the common requirements for all three options: language, international studies and business courses. Students interested in the International Accounting Program should refer to the Department advising sheets and consult with Prof. Terrie Riportella, Director of the Accounting Program.

Bachelor of Science in Business Administration

Preparation to become a business leader requires a broad background in business, a global perspective, a knowledge of the behavioral and social sciences, and the ability to use quantitative techniques in solving problems. The business core, the Core Program, and specific quantitative requirements provide this background. A student will gain further understanding of specific areas of business by concentrating in one of seven areas: **Accounting, Business Information Systems, Economics, Entrepreneurship, Finance, Management** or **Marketing**.

Business administration students also may major in Forestry and Environmental Management. Students interested in this major should read the detailed description in the Interdisciplinary Programs chapter of this Catalog.

A **Business Administration major** requires: Accounting 101, 270; Business Administration 101, 155, 215, 248, 265, 325, 330, 495; Computer Science 120; Economics 101, 102; and Mathematics 251. A student also must choose one of the concentrations described below; 12 credits beyond those listed above must be taken in the concentration area (eight of those 12 credits must be taken on the Elizabethtown College campus).

Accounting concentration: Accounting 205, 206 and one other accounting course.

Business Information Systems concentration: Computer Science 121, 205 or 122, and 309 or 341.

Economics concentration: Economics 301, 302 and one other economics course.

Entrepreneurship concentration: Business Administration 380 and two other entrepreneurship courses.

Finance concentration: Business Administration 424, 425 and one other finance course.

Management concentration: Business Administration 365, 499 and one other management course.

Marketing concentration: Business Administration 416 and two other marketing courses.

Bachelor of Science in International Business

Preparation for a career in international business requires an understanding of foreign cultures, language and cross-cultural interaction skills, a broad background in business, an internship and skills in a functional area of business. An **International Business major** must complete the following requirements in the four components of the program:

Modern Languages. Requirements for the modern language component include 211 and 212 of a modern language and a minimum rating of Intermediate High/1+ on the American Council on the Teaching of Foreign Languages (ACTFL) scale for French, German or Spanish. Those pursuing the Japanese language must achieve the designated level of the Japanese Foundation Proficiency Test. For the Chinese language, the requirements include Chinese 111 and 112 and at least eight additional credit hours of Chinese language completed in China during study abroad.

Foreign Culture and International Interaction. Requirements for the foreign culture and international interaction component include Political Science 245; Economics 101, and 307 or 311; Business Administration 197, 257, 258, 337; and one other foreign culture and international interaction course, normally taken abroad.

Business Studies. Requirements for the business studies component include: Accounting 101 and 270; Computer Science 120 (students concentrating in Business Information Systems must take Computer Science 121 instead of 120); Economics 102; Mathematics 251; Business Administration 215, 248, 265, 325, 497; and 12 credits in one of the following concentrations:

Accounting concentration: Accounting 205, 206 and 307.

Business Information Systems concentration: Computer Science 121 instead of Computer Science 120 under the business studies component; Computer Science 122, 205, and 309 or 341.

Economics concentration: Economics 301, 302 and one other economics course.

Finance concentration: Business Administration 327, 424 and one other finance course.

Management concentration: Business Administration 367, 347 or 365, and one other management course.

Marketing concentration: Business Administration 416 and two other marketing courses.

Experiential Learning. To meet requirements of the experiential-learning component, a student must complete an internship and also must study abroad in a foreign country where the target language is spoken. The study-abroad requirement is at least one semester with a program approved by the Department of Business and the Office of Registration and Records.

Admission to the International Business major is limited to 25 first-year students each year in order to maintain the quality of the program and to provide the necessary assistance for each student. Transfers are permitted from within the College or from other institutions on a space-available basis.

First-year International Business majors are selected by the Department of Business faculty. The selection process includes consideration of: 1) academic accomplishments; 2) motivation and aptitude; 3) preparation for international business study; 4) leadership and communications; and 5) interest in international business.

A prospective student must submit an application with all supporting documentation to the Admissions Office before March 15. Applications received after March 15 only will be considered on a space-available basis and will not be eligible for Department of Business scholarships.

Foreign students who are majoring in International Business should consult with the Director of the program during their first year to discuss their specific course requirements.

Admission to the International Business program does not imply that a student is guaranteed completion of the entire course of study. Generally, a student needs a 3.00 grade point average to qualify for a study-abroad program which is a

requirement for graduation in this major. For further information, contact Prof. Hossein Varamini, Program Director.

Bachelor of Arts in Economics

Preparation for a career in economics requires a broad background in basic economic theory and an in-depth study of the quantitative tools important to the economist. In light of the emphasis on the quantitative approach to economic theory, students are advised to select courses in mathematics and computer science beyond those specifically required in the economics curriculum.

Economics is one of the options for Social Studies certification, through which a student may receive certification to teach in secondary schools. Students with interests in this area should read the detailed descriptions in the Interdisciplinary Programs chapter of this College Catalog.

An **Economics major** requires: Economics 101, 102, 301, 302, 309 and three additional courses in economics; Computer Science 120 or 121; Mathematics 117 or 121, 251 and 252.

Minors Offered

The Department of Business offers minors in Business Administration and Economics. The **Business Administration minor** requires 24 credits of course work: Accounting 101; Economics 101; Business Administration 265 and 330; and two other courses offered in the Department of Business at the 200 level or above. The **Economics minor** requires 20 hours of course work: Economics 101, 102, 301, 302 and one additional economics course. For either minor to be conferred, a minimum grade point average of 2.00 must be maintained in minor courses.

Students interested in business and technology are advised to read the description of the Industrial Engineering Management major offered by the Department of Physics and Engineering.

Honors in the Discipline

The Department of Business participates in the College Honors in the Discipline Program. It is a significant opportunity for seniors who have excelled in the curriculum to conduct research resulting in publication in the proceedings from the Annual Student Conference in Business and Economics at Elizabethtown College. Invitations for the program are sent in April of each year.

Accounting Courses

101 Introduction to Accounting
4.00 credits. An introduction to the basic accounting methods and principles used in preparing financial statements for external reporting, accompanied by an application project that will incorporate interpretive and analytical techniques.

205 Intermediate Accounting I
4.00 credits. A study of generally accepted accounting principles and their application to asset accounting in the corporate financial reporting environment. Beginning with a brief review of introductory financial accounting topics including the accounting cycle and the financial statements and quickly moving to more challenging and complex topics: alternative procedures to account for current assets, plant and equipment, intangibles and investments; the accounting treatment of related income statement transactions; and valuation, classification, disclosure and cutoff. **Prerequisite: AC 101.*

206 Intermediate Accounting II
4.00 credits. A continuation of Accounting 205, the understanding of many concepts covered in the introductory course are expanded with a more in-depth examination of related concepts: liabilities and stockholder's equity sections of the balance sheet with detailed discussion of how to account for bonds payable, long-term notes, employee pensions and benefits and the issuance of stock. Calculation of earnings per share, how to correct errors in the financial statements, preparation of the statement of cash flows and deferred income taxes also are discussed. **Prerequisite: AC 205.*

270 Cost Management Accounting
4.00 credits. An understanding of how costs behave – cost-volume and profit analysis; are collected – job costing and process costing; assigned – activity-based costing; managed – strategic-based responsibility accounting; measured – budgets and variance analysis; and used in decision making – pricing and alternative use of capital. Multinational considerations also are included. **Prerequisite: AC 101.*

301 Introduction to Taxation
4.00 credits. Following the American Institute of Certified Public Accountants (AICPA) recommended Model Tax Curriculum as revised in 1999, a broad range of tax topics and principles of federal income taxation of individuals, corporations and partnerships are introduced. Understanding various types of taxes in the U.S. system and the basis for the federal income tax system is emphasized. Tax concepts that relate to individual taxpayers, and identifying the similarities and differences of individual taxation items to the taxation of business entities are learned, emphasizing the role of taxation in the business decision-making process, tax law and research, and concepts application. **Prerequisite: AC 101, or permission of instructor.*

302 Advanced Studies in Taxation
4.00 credits. This course follows the American Institute of Certified Public Accountants (AICPA) recommended Model Tax Curriculum as revised in 1999. Students will develop advanced technical and technological skills in entity taxation, the tax effects of multijurisdictional commerce and advanced issues facing individual taxpayers, including retirement, estate/gift issues and financial planning. Advanced skills with tax research materials are developed, as is an appreciation for the work ethic and professional responsibilities. Emphasis will be placed on learning to employ tax law in various financial and tax-planning techniques. **Prerequisite: AC 301.*

307 International Accounting
4.00 credits. A broad overview of the accounting issues unique to global enterprises, variations in financial reporting requirements among countries and efforts to harmonize those differences, financial analysis of multinational enterprises, managerial accounting and control, transfer pricing, taxation, performance evaluation, and techniques for reporting and managing the risk of transacting business in multiple currencies are addressed. **Prerequisite: AC 206, or permission of instructor.*

308 Accounting for Nonprofit Organizations
4.00 credits. The applicable principles and uses of fund accounting to include budgeting, preparation and reporting of general and special financial statements and their use in decision making, controlling and identifying general operating funds and those restricted and non-restricted special funds are discussed. An experiential project is assigned involving a real-life case study, which will include evaluating performance measurement standards. **Prerequisite: AC 206 and junior status.*

310 Accounting Information Systems
4.00 credits. An introduction to the components of an accounting information system and its relationship to the overall management information system. The use of information to support the planning, analysis and reporting of business activities using fully integrated information systems is discussed. Students are introduced to system design and documentation, including flowcharting and control procedures. All major transaction processing cycles and the effect on the accuracy of accounting information are reviewed. Students are introduced to and required to use complex microcomputer and database applications. **Prerequisite: AC 206.*

370-378 Special Topics in Accounting
Variable credit. Courses of special interest to the student and the instructor offered on an occasional basis.

405 Auditing
4.00 credits. A study of auditing theory and standards, professional ethics and auditor's legal liability, with in-depth analysis of the audit process including risk assessment, the theory and auditing of internal control systems, audit evidence, working papers, quality control, statistical sampling, implications of computer based systems to the audit process, and the preparation of audit reports. **Prerequisite: AC 310 or permission of instructor.*

406 Advanced Accounting
4.00 credits. A study of the accounting theory and practice of business combinations, consolidated financial reporting according to United States GAAP, foreign currency transactions and financial statement translation, derivatives and special accounting topics including business liquidations and reorganizations, SPEs, joint ventures and partnerships. **Prerequisite: AC 206.*

471 Internship in Accounting
Variable (4.00 or 12.00) credits. Students gain work experience with either a public accounting firm, a business organization or a governmental agency. **Prerequisite: approval of Department or Accounting Chair.* Register by Instructor.

474 Volunteer Income Tax Assistance Program
2.00 credits. A hands-on opportunity to apply knowledge that was learned in Accounting 301 by preparing income tax returns under the Volunteer Income Tax Assistance (VITA) Program of the Internal Revenue Service in an experiential-learning environment. Students interact with clients, accumulate their tax information and prepare their federal, state and local income tax returns using tax software. **Prerequisite: AC 301.* Register by Instructor.

480-489 Independent Study in Accounting
Variable credit. Independent study and research on a problem or topic in the field of accounting. **Prerequisite: approval of Department Chair and the Independent Study Committee.* Register by Instructor.

Business Administration Courses

101 Business and Society
4.00 credits. Managers function within an environment and their actions influence a number of stakeholders who in turn influence managerial decision making. Environmental awareness is increased by describing and analyzing seven sub-environments: stakeholder, economic, political, social, ethical, competitive and ecological. The course provides a context for other courses in the program and acquaints students with the dynamics of managing in the business, public and nonprofit sectors of the United States economy. Register by Instructor.

155 Managerial Communications
2.00 credits. A study of the various communications techniques, incorporating the use of technology. Emphasis is on international communication, the analysis, ethics and organization of materials for effective oral and written presentations.

197 International Business Environment
4.00 credits. An introduction to the international business environment, including the political, social, economic and cultural dimensions of foreign countries before students study abroad. Students develop their understanding of the differences between foreign cultures and their own culture and improve the interaction skills necessary to function effectively in the global community. Register by Instructor.

215 Principles of Marketing
4.00 credits. An introductory course emphasizing key concepts and issues underlying the marketing process and how it operates in today's dynamic organizations. The marketing mix is examined on a broad scale, with students developing an understanding of how decisions in each element impact and influence the others. Among the topics covered are segmentation, consumer behavior, product development, promotional campaigns, marketing research, distribution planning and pricing strategies. The course will culminate in a final project, with students developing and presenting a marketing plan.

248 Quantitative Methods/Operations Management
4.00 credits. Usage of quantitative methods and operations management concepts to optimize business decisions is learned. The quantitative methods covered are forecasting, decision making, inventory management, and linear programming, and the operations management concepts are project management, statistical process control, materials requirement planning, enterprise resource planning, scheduling, reliability, acceptance sampling and learning curves. **Prerequisite: MA 251.*

257 Exporting and Importing
2.00 credits. Focus on the management of flow of goods and services across national borders to enhance the competitiveness of small and medium-size firms including: market research, agent selection, export financing, government regulation, transportation, insurance and documentation. Register by Instructor.

258 Global Business Negotiations
2.00 credits. Students acquire knowledge about effective negotiation techniques across national borders. A framework is provided to guide students in understanding the process of developing negotiation skills in business transactions and learning to close deals, create value, resolve disputes and reach lasting agreements with counterparts in other countries. Register by Instructor.

265 Management and Organizational Behavior
4.00 credits. Critical management issues in planning, organizing, leading and controlling within the framework of understanding why and how people interact with one another, in groups, and with the organization itself is examined, with opportunities to enhance communication and interpersonal skills through learning at multiple levels including: individual reading, study and analysis; in-class lectures and exercises; and small discussion groups, in which newly acquired knowledge can be applied to the analysis of real-world scenarios.

290 Emerging European Union
3.00 credits. An introduction to the history and social structure of European economic integration from 1927 to present by examining the problems faced by the member states, the specific role of British politics, eastern European politics in the European Union and European Monetary Union, debates and the impact of the Union on Britain, the accession states and the United States, in terms of both its social system obstacles to integration and its European public policy. An understanding of social conflicts inherent in the integration of multiple social systems and cultural, business, political, technological and legal obstacles associated with economic integration of the European Union and the tenuous relationship between the Union members is emphasized. **Offered only in the Summer Study Abroad in Oxford, England Programme and the Department of Business program in Prague.* Register by Instructor.

311 Marketing Research
4.00 credits. An introduction to the theories and techniques behind the development, execution and dissemination of marketing research. Taught through a hands-on approach, students will have the opportunity to explore a variety of research methodologies and techniques, both quantitative and qualitative. The course will culminate in a final project conducted in conjunction with an actual client. **Prerequisite: BA 215.*

312 Advertising Management
4.00 credits. An overview of the advertising process from both an agency and client perspective. Students will receive a strong foundation in research and strategy development, the building blocks upon which successful campaigns are built. The course will culminate in a final project encompassing research, strategy, creative and media planning, with results pitched to an actual client. **Prerequisite: BA 215.*

313 Services and Retail Marketing
4.00 credits. The service sector is the bulk of all marketing activities and faces a set of challenges that product marketers do not encounter. This course examines service marketing's unique characteristics and frames strategic marketing considerations in terms of these characteristics. In addition, special focus is placed on retailing as a major contributor of economic growth. **Prerequisite: BA 215.*

314 Sales and Sales Management
4.00 credits. An introduction to the principles of salesmanship as practiced in the modern business organization and an examination of the role of the sales manager in organizing and directing a sales force. Topics include: the relationship-selling process, developing and making a sales presentation, use of contact management software, and principles of sales management (including recruiting, territory allocation, client contact management, and compensation).

315 Internet Marketing
4.00 credits. A development of understanding the complexity of marketing goods and services over the Internet. Developing strategic business models for e-commerce, and planning and implementing an Internet-focused organization are covered. Development or revision of a webpage for a business client that includes the home page and at least two child pages is required as a group project. **Prerequisite: BA 215.*

317 International Marketing
4.00 credits. A focus upon understanding how the practice of marketing is affected by the internationalization of enterprises. Subjects include the globalization of markets, international business ethics, and development of a marketing strategy that can transcend national boundaries. **Prerequisite: BA 215.*

319 Consumer Behavior
4.00 credits. Development of an understanding of the explanations, based on behavioral sciences, for consumer purchasing activities. Subjects include the consumer's role in society, group influences on consumers, and the nature of individual consumers, the nature of individual consumers as determinants of buying behavior, and consumer decision-making models.

325 Corporate Finance
4.00 credits. An introduction to fundamental tools and concepts used in short-term and long-term financial decision making. An overview of the major financial markets is provided. Financial statements, discounted cash flow analysis, bond and stock valuation models, risk and return for assets and portfolios, cost of capital, financing decisions, capital budgeting, capital structure of the firm, and dividend policy are covered. **Prerequisite: AC 101.*

327 International Financial Management
4.00 credits. Development of an understanding of the international financial environments in which economic policy and business decisions are made. Specifically, the course covers the spot and forward exchange markets, the Eurocurrency market and the international capital markets. The impact of exchange rate behavior on corporations and the foreign exchange risk management for multinational corporations is covered. **Prerequisite: BA 325.*

330 Legal Environment of Business
4.00 credits. The study and evaluation of legal, ethical and global issues as they pertain to understanding how a business organization operates in a changing socio-economic environment.

331 Business Law I
4.00 credits. Legal concepts applicable to the formation and execution of contracts for the business environment are studied with examination of the evolution of contract law and the institution of uniform standards to simplify its applications across geographic boundaries.

332 Business Law II
4.00 credits. The study of legal concepts that define the structure of a business organization with emphasis on how to form a legal entity and manage property right issues associated with forming organizations.

333 Cyberlaw and E-Commerce Regulation
4.00 credits. An examination of important substantive areas of the law vis-a-vie the cyber entrepreneur centered and e-commerce entity within the specific framework of the American legal system. Analysis of the law most important to cyber entrepreneurs and managers of e-commerce firms with in-depth coverage of e-commerce business models, intellectual property issues, electronic contracts, and government regulation of the Internet emphasized. Current topics in cyber law that impact shareholders, executives, managers and employees of privately and publicly held business entities are covered.

337 International Legal and Ethical Environment of Business
4.00 credits. An introduction to the study of international business law, the function and importance of public international law, the role of public and private international organizations, and public policy and ethics in setting standards and guidelines for international business. An understanding of the legal problems associated with economic integration within the European Union and North America is emphasized.

347 Global Supply Chain Management
4.00 credits. An examination of the real-time integration of materials, information and value-added services required by a corporation to be successful in a dynamic and globally competitive arena. Basics of exporting and importing, as well as fundamental concepts dealing with the entire process of resource acquisition and its management for multinational corporations are covered.

350 European Union Simulation I (PS 350)
4.00 credits. Study of the principles and theories of European integration; the history of the current European Union (E.U.), from the Treaty of Rome to the

present; and the structure and functioning of the European Union, including class participation representing an E.U. Member State in the annual Mid-Atlantic European Union Consortium E.U. Simulation in Washington, D.C.

360 Washington Institute (PS 360)
4.00 credits. The course highlights relationships between the legislative, executive, independent agencies, and third-party institutions that directly affect how policy is made in the United States. The course exposes students to the mechanism that is used to formulate policy for the United States. The Institute will focus heavily on international policy and the inner workings of the various institutional agents that participate in the process of making policy. Students will observe and develop a critical sense of how to weigh the various interests before policy is ultimately made. Students will learn to examine the purpose of policy and evaluate how it will impact on various industries. **Prerequisite: BA 101*. Register by Instructor.

365 Human Resource Management
4.00 credits. A unique overview of the Human Resource Management (HRM) function in terms of practicality and real-world application, the processes and methods used in HRM planning, along with techniques for conducting job analysis, writing job descriptions, equal employment opportunity compliance, recruiting and selecting employees, orientation, training and development, appraising employee performance, and maintaining employee discipline are examined. Varied instructional methods include lecture, small group discussion, document creation and case-study analysis. **Prerequisite: BA 265*.

367 International Management
4.00 credits. An approach to global economy through the analysis of managerial practices in international companies regardless of their sizes, focusing upon the key success factors of managing a company across national boundaries. The students' understanding of the field of international business from a managerial perspective is based on the integration of the learned concepts and tools with real-world applications. **Prerequisite: BA 265*.

370-378 Special Topics in Business
Variable credit. Courses of special interest to the student and the instructor offered on an occasional basis.

380 Entrepreneurship
4.00 credits. An assessment and development of entrepreneurial skills, emphasizing a "hands-on" approach based on case studies on entrepreneurial ventures, writing business plans on opportunities identified by students, experiential exercises and executive speakers (entrepreneurs, investors and consultants). In-class topics enable students to understand the entrepreneur's profile, and to acquire the knowledge and skills necessary to create, start, finance, manage and grow a new venture. **Prerequisite: BA 265*.

382 Entrepreneurial Marketing
4.00 credits. This course provides students the opportunity to assess and develop their entrepreneurial skills. The class emphasizes essential marketing concepts and tools and their real-life application by entrepreneurs. The topics covered in class include innovative and informal marketing approaches, which will enable students to understand the marketing side of a successful entrepreneurial business. This hands-on approach is based on class discussion and interaction, executive speakers (entrepreneurs, investors and consultants), case studies on entrepreneurial ventures, and experiential exercises and applications.

400 Senior Project in Business
3.00 credits. Students who have been invited and accepted to participate in the Honors in the Discipline Program may register for this course in the semester in which the research or creative project is completed. Completion of this course does not assure recognition for Honors in the Discipline. Register by Instructor.

414 Organizational Marketing
4.00 credits. Integrating marketing theories and concepts for strategic planning and implementation. Techniques include case studies and the use of a computer simulation that allows students in small groups to simulate the running of a company with emphasis on marketing decisions. **Prerequisites: BA 215 and BA 319.*

416 Marketing Management
4.00 credits. Integrating marketing theories and concepts for strategic planning and implementation. This course draws on previous coursework in marketing, with special emphasis on the application of marketing theories. Case studies and class projects will be primary learning tools. **Prerequisites: BA 215 and BA 319.*

424 Investments
4.00 credits. This course emphasizes the various classes of investments available to the investor, sources and uses of investment information, and security and capital market valuation. Fundamental concepts, theories and techniques of investing in different assets are provided. Portfolio management is introduced. **Prerequisite: BA 325.*

425 Advanced Financial Management
4.00 credits. An advanced course in corporation/business finance, in which major topic areas such as capital budgeting, working capital management, leasing, mergers and financing are examined in-depth. Cases, readings and problems are used to illustrate the concepts covered. **Prerequisite: BA 325.*

466 Operations and Production Management
4.00 credits. A junior-/senior-level course in which the students combine class-room study of operations and production management methodologies with field trips to manufacturing and service organizations. Students are given the most

recent management methods for maximizing outcomes of the production and service functions at minimal cost, while achieving superior levels of customer satisfaction. **Prerequisite: BA 265.*

470-474 Internship in Business
Variable (0.00 to 4.00) credit(s). Combined academic goals, abstract/theoretical and experiential learning through an internship assist in the reflection, analysis and integration of experiences and insights gained through internships with the academic theory, principles, concepts, and social and ethical dimensions of the discipline and subject area. This strengthens students' lifelong-learning skills, professional and public-speaking skills, personal and professional values and ethics, and self-confidence and clarifies personal and career goals. Students must complete at least 125 hours of internship assignment over a 12-week period (eight weeks in summer). Register by Instructor.

480-489 Independent Study in Business
Variable credit. Opportunity for students to engage in independent study in some area of business administration. **Prerequisites: approval of Department Chair and the Independent Study Committee.* Register by Instructor.

495 Business Policy and Corporate Strategy
4.00 credits. A comprehensive and integrative course that builds on knowledge acquired in the prior business classes, this class offers the opportunity to integrate that knowledge through a cross-functional approach. The focus is understanding how companies craft and implement strategies that preserve and create sustainable competitive advantage. **Prerequisite: senior status.* Register by Instructor.

497 International Business Seminar
4.00 credits. As a capstone course in international business, the course is designed to provide both the theoretical perspectives and the practical applications of global business. The course integrates concepts, principles and practices from prior courses in accounting, management, finance and marketing to prepare students for a successful career in international business. **Prerequisite: senior status and International Business majors.* Register by Instructor.

498 Seminar in Marketing
4.00 credits. Drawing on students' foundational coursework in marketing, this course examines current marketing topics in more depth and with more rigor. Research and/or projects are primary learning tools. **Prerequisite: BA 215.*

499 Seminar in Management
4.00 credits. Advanced study management course is topical in nature in order to provide a comprehensive examination of contemporary management issues, including but not limited to organizational design, policy formulation, leadership, motivation and corporate culture. **Prerequisites: BA 265 and BA 365.*

Economics Courses

101 Principles of Macroeconomics
4.00 credits. An introduction to a country's gross domestic product. Topics covered include: factors affecting a country's output of goods and services, role of fiscal policy and monetary policy in dealing with inflation and unemployment, the Federal Reserve system and the goal of price stability, causes and consequences of budget deficits, and factors affecting trade deficits and exchange rates.

102 Principles of Microeconomics
4.00 credits. Topics covered include: the basis for decision making by economic agents, utility maximization by consumers, the demand curve, profit maximization by firms, diminishing returns and input choice, optimal output and price for a firm in various market structures, market failure, income inequality, and comparative advantage and international trade.

301 Intermediate Microeconomics
4.00 credits. Description of the theory of the consumer and the firm. Topics include: analytical treatment of maximization of utility and profits, resource use and allocation, market structures and welfare analysis. **Prerequisite: EC 102.*

302 Intermediate Macroeconomics
4.00 credits. The course describes macroeconomic theories to explain the business cycle. Factors affecting major macroeconomic variables such as gross domestic product, inflation and interest rates. Policies for attaining full employment and price stability. **Prerequisite: EC 101.*

305 Managerial Economics
4.00 credits. Application of microeconomic concepts for making business decisions, including demand estimation and forecasting, cost factors, nature of competition in the industry, and price and output decisions. **Prerequisite: EC 102.*

307 International Economics
4.00 credits. The basic concepts of international trade and payments. Impact of globalization. Commercial policy. Role of multilateral institutions. **Prerequisite: EC 101.*

309 Introduction to Mathematical Economics
4.00 credits. The course provides an introduction to techniques of mathematical modeling in economics and business. Linear algebra. Cramer's Rule. Comparative statics. Differential calculus. Unconstrained and constrained optimization. First order and second order conditions for an extremum. Dynamic optimization. Use of mathematical software. Several applications in microeconomics, macroeconomics, operations management and finance. **Prerequisite: MA 117.*

311 Economic Development
4.00 credits. Theories of international trade and economic growth. Capital flows. Migration. Role of institutions and NGOs. Policies for improving social welfare. Emphasis on developing countries. **Prerequisite: EC 101.*

370-378 Special Topics in Economics
Variable credit. Courses of special interest to the student and the instructor offered on an occasional basis.

400 Senior Project in Economics
0.00 credit. Students who have been invited and accepted to participate in the Honors in the Discipline Program may register for this course in the semester in which the research or creative project is completed. Completion of this course does not assure recognition for Honors in the Discipline. See Department Chair for additional information. **Prerequisite: invitation to Honors in the Discipline Program.* Register by Instructor.

480-489 Independent Study in Economics
3.00 credits. Independent study and research on a problem or topic in the field of economics. **Requires permission of Department Chair and Independent Study Committee.* Register by Instructor.

Department of Chemistry and Biochemistry (B.S.)

Hoffman (Chair), Hagan, Kneas, MacKay, Schaeffer

Chemistry courses contribute to both the liberal arts component and the professional component of the balanced studies that Elizabethtown seeks to foster. Students may choose chemistry as a major area of study leading to a career that requires a detailed knowledge of chemistry, as a coherent minor area of study, as an elective course or courses, or as part of their Core Program requirements.

Students majoring in chemistry typically go on to graduate studies in chemistry or biochemistry, to the study of medicine, to hospital or industrial laboratories, to secondary education or to business positions in the chemical and pharmaceutical industry.

Professional Accreditation

The Department of Chemistry and Biochemistry is on the approved list of the American Chemical Society Committee on Professional Training.

Majors Offered

The Department offers majors in **Biochemistry** and **Chemistry**, with five possible chemistry concentrations. The Department also participates in the General Science Certification Program. Refer to the Interdisciplinary Programs chapter of this College Catalog for a detailed description.

Bachelor of Science in Biochemistry

The **Biochemistry major** prepares students for medical school or other health professional schools, graduate study in biochemistry and related fields, or employment that requires baccalaureate education.

The Biochemistry curriculum requires Chemistry 105, 113, 114, 201, 214, 242, 323, 324, 326, 327, 343, 344, 353, 361-2, 461-2 and four credits from among 491, 492 or 496; Biology 111, 112, 324-324L; three additional credits of biology with emphasis on genetics and three credits of biology or chemistry; Mathematics 121 and 122; and Physics 200, 201.

Bachelor of Science in Chemistry

The **Chemistry major** offers five concentrations: the American Chemical Society Approved Professional Chemistry curriculum, the Secondary Education Certification, the Chemistry Management curriculum, the Chemical Physics curriculum and the Forensic Science curriculum.

The **American Chemical Society (ACS) concentration** prepares the student for graduate school or for a career in industrial or government laboratories. The ACS-approved curriculum requires Chemistry 105, 113, 114, 201, 214, 242, 323, 324, 326, 343, 344, 353, 354, 361-2, 461-2, two courses from among 402, 414 and 421, and four credits from among 491, 492 or 496; Biology 111; Mathematics 121, 122 and 222; and Physics 200 and 201.

The **Secondary Education curriculum** (Chemistry Education) prepares students for high school teaching. The Secondary Education curriculum requires Chemistry 105, 113, 114, 201, 214, 242, 323, 343, 326 or 353, 361-2 and one additional chemistry course; Biology 111 and 112; Mathematics 121 and 122; Physics 200 and 201; Education 105, 150, 241, 282, 305, 470 and 490; and two English courses.

The **Chemistry Management option** is preparation for sales or management positions in chemical and related industries. The chemistry management curriculum requires Chemistry 105, 113, 114, 201, 214, 242, 323, 343, 326 or 353, 361-2, 461-2 and one additional chemistry course; Biology 111; Mathematics 121 and 122; Physics 200 and 201; Accounting 101; Business Administration 215, 265, 325, 333 (or 330), and 466; and Economics 101.

The **Chemical Physics curriculum** is a foundation for work at the interface between chemistry and physics. This curriculum requires Chemistry 105, 113, 114, 201, 214, 242, 343, 344, 353, 354, 361-2, 461-2 and at least four credits from 491, 492 or 496; Mathematics 121, 122 and 222; and Physics 200, 201 and 202. Also, a minimum of three courses from the following: Chemistry 402, 414 and 421; two credits from 491, 492 or 496; Mathematics 362; or any 300- or 400-level Physics courses.

The **Forensic Science curriculum** introduces students to the field of forensic science, preparing them for graduate school or for a career in the laboratory. The track provides a solid background in chemistry, along with some additional courses that would be of benefit for someone interested in pursuing a career in forensic science. The Forensic Science curriculum requires Chemistry 105, 109, 110, 113, 114, 201, 214, 242, 323, 326, 343, 353, 361-2, 414 and six credits from 471, 491, 492 or 496; Biology 111, 112 and 211; Mathematics 121, 122 and 251; Physics 200 and 201; Sociology 216 and Anthropology 363.

Minors Offered

The Department offers minors in **Biochemistry** and **Chemistry**. These minors prepare students to apply chemical concepts and practices in their major discipline.

The **Biochemistry minor** requires Chemistry 105, 113, 114, 201, 214 and a minimum of four additional credits of biochemistry.

The **Chemistry minor** requires Chemistry 105, 113, 114, 201, 214 and a minimum of four additional credits of advanced chemistry as approved by the Department faculty.

Additional options may be tailored to the student's needs in consultation with the student's advisor and the Department Chair. Students planning much work in chemistry should consult with a Department advisor as early as possible to plan the sequence of courses in chemistry, mathematics, physics and biology that will be to their greatest advantage. Many upper-level chemistry courses have calculus and physics courses as prerequisites. The sequence in secondary education also requires early planning to ensure proper spacing of education courses.

Honors in the Discipline

The Department of Chemistry and Biochemistry participates in the College Honors in the Discipline Program. For guidelines, students should consult the Department Chair.

Chemistry Courses

101 NPS General Chemistry: Practical Principles
4.00 credits. **(Natural and Physical Science Core Course)** An introduction to the study of the material world from a phenomenological, measurable and observable viewpoint. Topics include elements and compounds, weight relationships, states of matter, solutions, descriptive reactivity, reaction energetics, solution equilibria, and organic and biochemical structure and nomenclature. Hours: lecture 3, laboratory 3. **Prerequisite: high school algebra.* Spring Semester.

105 NPS Fundamentals of Chemistry: Introduction to Molecular Science
4.00 credits. **(Natural and Physical Science Core Course)** An introduction to the study of the material world from a conceptual, model-building viewpoint. Topics include: elements and compounds, atomic composition and electronic structure, bonding and molecular structure, physical properties, thermodynamics and reaction kinetics. Hours: lecture 3, laboratory 3. **Prerequisites: high school chemistry and algebra.* Fall semester.

109 NPS Introduction to Forensic Science
4.00 credits. **(Natural and Physical Science Core Course)** Scientific principles are applied to the analysis of evidence found at a crime scene. Fingerprints, bloodstains, drugs, paint chips, broken glass, and strands of hair are all valuable evidence for solving crimes, but only if they are properly collected and analyzed. This course provides an overview of the field of forensic science and ties in the scientific concepts underlying the various techniques. Fall semester.

110 Forensic Science Laboratory
2.00 credits. Designed to parallel the topics covered in Chemistry 109. Analytical methods for analyzing evidence commonly found at crime scenes. Microscopic, wet bench and instrumental techniques are covered. **Prerequisite: CH 109*. Spring semester.

113 Organic Chemistry I
4.00 credits. Topics include formulas, stoichiometry, bonding, geometry, equilibrium, reactivity, kinetics and instrumentation applied to carbon compounds. The importance of organic compounds across disciplines and in everyday life will be emphasized. Hours: lecture 3, laboratory 3. **Prerequisite: CH 105*. Spring semester.

114 Organic Chemistry II
4.00 credits. A continuation of Chemistry 113, emphasizing synthesis and reaction mechanisms. Hours: lecture 3, laboratory 3. **Prerequisite: CH 113*. Fall semester.

116 Selected Topics - Organic Chemistry
1.00 credit. Current trends as well as applications of organic chemistry to everyday

life are discussed. **Prerequisite or corequisite: CH 114, or permission of the instructor.* Spring semester. Register by Instructor.

201 Laboratory Methods in Chemistry
1.00 credit. This course presents a number of laboratory techniques that are used in many of the upper-level chemistry (and other science) courses. These techniques include: keeping a laboratory notebook, making careful volumetric and gravimetric measurements, performing statistical analysis and writing a report. **Prerequisite: CH 105.*

H207 HNR NPS Chemistry and Politics of Cancer and AIDS WRI
4.00 credits. **(Natural and Physical Science Core Course - Honors)** This interdisciplinary course seeks to rectify the science of two deadly diseases with the public policy that has been established around these diseases. Many of us have preconceived notions about how we view AIDS and cancer, but does the actual biochemical basis of these diseases correlate well with their corresponding public policies? **A Writing and Research Intensive Course.* Register by Instructor.

214 Chemical Instrumentation
4.00 credits. Instrumental methods of analysis. Electrochemical, spectrophotometric, and chromatographic methods are discussed. Laboratory introduces a variety of analytical instruments and associated methods including computer-based data analysis. Hours: lecture 2, laboratory 6. **Prerequisite: CH 114 and 201.* Spring semester.

242 Physical Inorganic Chemistry
4.00 credits. Thermodynamic stability and bonding in ionic and covalent inorganic substances. Inorganic reactivity in acid-base and oxidation-reduction systems. Some descriptive chemistry of main group and transition metal elements. Laboratory is designed to acquaint students with synthetic methods in organic and inorganic chemistry and purification and identification. Hours: lecture 3, laboratory 3. **Prerequisite: CH 114.* Spring semester.

291 Independent Research in Chemistry
Variable (1.00 to 3.00) credit(s). An independent experimental or theoretical investigation under the close supervision of a faculty member and designed specifically for students who are too early in their coursework to begin CH 491, CH 496, or CH 471. **Prerequisite: Permission of Instructor.* Register by Instructor.

292 Independent Research in Chemistry
Variable (1.00 to 3.00) credit(s). An independent experimental or theoretical investigation under the close supervision of a faculty member and designed specifically for students who are too early in their coursework to begin CH 491, CH 496 or CH 471. **Prerequisite: Permission of Instructor.* Register by Instructor.

323 Biochemistry I
3.00 credits. The chemistry of living matter, treating the structures, metabolism, and functions of proteins, lipids, carbohydrates and nucleic acids. **Prerequisites: CH 214 and BIO 111.* Fall semester.

324 Biochemistry II
3.00 credits. A continuation of Chemistry 323. **Prerequisite: CH 323.*
Spring semester.

326 Techniques of Biochemistry I
2.00 credits. Techniques used in experimental investigations in biochemistry. Hours: laboratory 4. **Corequisite: CH 323.* Fall semester.

327 Techniques of Biochemistry II
2.00 credits. A continuation of Chemistry 326. Hours: laboratory 4. **Prerequisite: CH 326 and corequisite: CH 324.* Spring semester.

343 Atomic Structure (PHY 221)
3.00 credits. Twentieth-century developments in the structure of the atom. Topics include X-rays, radioactivity, atomic spectra, blackbody radiation, introduction to quantum theory emphasizing the extranuclear structure of the atom, elementary particles, nuclear structure and transformations. This course is the same as Physics 221. **Prerequisites: PHY 201 and MA 122.* Fall semester.

344 Molecular Structure and Mechanics
3.00 credits. An extension of quantum theory to molecules and condensed states of matter. Includes principles of optical and magnetic resonance spectroscopy for molecular structure determination and statistical mechanics as a basis for chemical equilibrium and reactivity. **Prerequisite: CH 343.* Spring semester.

353 Advanced Chemistry Laboratory I (PHY 353)
3.00 credits. Experimentation, data acquisition, data analysis and technical presentations appropriate for the physical and chemical sciences. Emphasis on statistics of physical/chemical experimental data and computer methods of analysis. This course is the same as Physics 353. Hours: lecture 2, laboratory 6. **Prerequisites: MA 121 and PHY 201.* Fall semester.

354L Advanced Chemistry Laboratory II
3.00 credits. Problems and experiments in the determination of molecular structure. Hours: lecture 1, laboratory 7. **Corequisite: CH 344.* Spring semester.

361 Chemistry Seminar I
0.00 credit. With Chemistry 362, a two-semester sequence in which a student must present a minimum of one seminar and regularly attend those presented by other

students. The student must enroll in both Chemistry 361 and Chemistry 362 to receive credit, which is given upon completion of Chemistry 362. Hours: seminar 1. Fall semester.

362 Chemistry Seminar II
1.00 credit. With Chemistry 361, a two-semester sequence in which a student must present a minimum of one seminar and regularly attend those presented by other students. The student must enroll in both Chemistry 361 and Chemistry 362 to receive credit, which is given upon completion of Chemistry 362. Hours: seminar 1. Spring semester.

370-378 Special Topics in Chemistry
Variable credit. Study of an advanced topic, experimental or theoretical, of interest to the student. **Prerequisite: Department Chair approval.* Register by Instructor.

402 Advanced Inorganic Chemistry
3.00 credits. A study of the elements and their compounds based upon atomic and molecular structure. **Prerequisite: CH 344*. Fall semester.

414 Advanced Instrumental Analysis
4.00 credits. Modern analytical methods, applications and instrumentation. **Prerequisite: CH 214*. Spring semester.

421 Advanced Organic Chemistry
3.00 credits. A study of organic reactions based on experimental and advanced theoretical studies. **Prerequisite: CH 344*. Spring semester.

461 Chemistry Seminar III
0.00 credit. With Chemistry 462, a two-semester sequence in which a student must present a minimum of one seminar and regularly attend those presented by other students. The student must enroll in both Chemistry 461 and Chemistry 462 to receive credit, which is given upon completion of Chemistry 462. Hours: seminar 1. Fall semester.

462 Chemistry Seminar IV
1.00 credit. With Chemistry 461, a two-semester sequence in which a student must present a minimum of one seminar and regularly attend those presented by other students. The student must enroll in both Chemistry 461 and Chemistry 462 to receive credit, which is given upon completion of Chemistry 462. Hours: seminar 1. Spring semester.

471 Forensic Science Internship
6.00 credits. Work experience in a laboratory that performs forensic science analysis. The laboratory must be an ASCLD certified laboratory (listed at

www.ascld-lab.org/legacy/aslablegacylaboratories.html). The internship is normally performed during the summer months and need not be located near the College. Register by Instructor.

480-489 Independent Study in Chemistry or Biochemistry
Variable credit. Individual study in areas of interest for students capable of conducting independent research. **Prerequisites: approval of the Department Chair and the Independent Study Committee*. Register by Instructor.

491 Research in Chemistry
Variable (1.00 to 4.00) credit(s). An original experiment or theoretical investigation under the close supervision of a faculty member. Experimental design and a written report are required. Fall semester. Register by Instructor.

492 Research in Chemistry
Variable (1.00 to 4.00) credit(s). An original experiment or theoretical investigation under the close supervision of a faculty member. Experimental design and a written report are required. Spring semester. Register by Instructor.

496 Independent Problems in Chemistry
Variable (1.00 to 4.00) credit(s). An independent experimental or theoretical investigation under the close supervision of a faculty member. Experimental design and a written report are required. **Prerequisite: permission of the instructor*. Register by Instructor.

Department of Communications (B.A.)

McFarland (Chair), Donovan, Gillis, Johnson, Wennberg, Yoder

The Department of Communications offers a comprehensive preparation in the professional field of communications. In addition to developing written, spoken and performance skills, students learn communications theories, media design, management and production.

Advanced courses in oral presentation, management, graphics, writing, audio and video production, digital media writing and design and cultural communications among others, permit majors to advance into this discipline. Four concentration areas provide students choices into specific specialization areas within the major: **Corporate Communications** (public relations and marketing), **Mass Communications**, **New Media Communications** (digital media and web-design), or **Cultural Studies Communications**.

Department facilities are located in the Steinman Center for Communications and Fine Arts. This Center contains modern equipment in audio and video studios, a photography lab, and graphics and multi-image laboratories. The student-operated media stations, WWEC 88.3 FM and ECTV Channel 40, are housed in the Center. Additionally, the student-run newspaper, The Etownian, is operated by the Department.

The curriculum is complemented by a number of Departmental organizations: WWEC-FM radio; Photography Club; Society for Collegiate Journalists, the honorary society; International Association of Business Communicators; Collegiate Broadcaster, Inc.; ECTV-40 and others. The Etownian provides excellent journalism experiences for majors. These organizations sponsor speakers, workshops, contests and field trips to enhance campus life, while making the student's classroom experience more meaningful.

The curriculum, along with the many co-curricular activities, prepares majors for careers in corporate and institutional communications, public relations, marketing communications, broadcasting and media production related fields, newspaper and magazine writing and reporting, advertising, sales, law and many more fields.

Majors Offered

The Department offers a major in **Communications** with four concentrations.

Bachelor of Arts in Communications

The **Communications major** requires 36 common credits: Communications 120, 125, 135, 210, 211, 220, 230, 248, and 485, and 20 additional credits in a concentration. The concentration must be declared prior to registration for the junior year. Although not required, a minor course of study is recommended by the Department of Communications.

The **Corporate Communications concentration** requires Communications 333, 351, 358 or 412, plus either two additional communication electives or one communication elective and one business elective from the following set of courses: Communications 304, 316, 348, 408, Business Administration 215, 265, 311, 312, 319.

The **Mass Communications concentration** requires Communications 316, 336, 348, and two approved electives from the following set of courses: Communications 304, 310, 315, 333, 336, 348, 422, 424 and 426.

The **New Media Communications concentration** requires Communications 310, 315, 426, and two approved electives from the following set of courses: Communications 316, 333, 336, 348, 358, 408, and 422.

The **Cultural Studies Communications concentration** requires: Communications 251, 252, 301, plus either two additional communication electives or one communication elective and one interdisciplinary elective from the following set of courses: Communications 304, 316, 333, 336, 348, 408, 422, and 424. If choosing an interdisciplinary elective, it must complement the student's plan of study and be approved by the advisor and Department Chair prior to the student's registration.

Minors Offered

A **Communications minor** is offered to students majoring in other programs. The minor permits students to reach a level of competency in written, spoken and visual communications to complement their primary area of preparation. The 24 credits required for a minor in Communications include: Communications 120, 125, two of 211, 220, and 230, and two additional communications electives from Communications 210, 248, 251, 252, 301, 304, 316, 333, 336, 348, 351, 358, 370, 408, 412, 422, 424, and 426.

Internships and Practica

Out-of-classroom, on-the-job field experiences are encouraged of all majors and minors. An experience linking the academic world and the work world can enable an advanced student to apply – in a practical way – understandings and abilities in a career-related position. Practica may be elected by majors and minors at any time and are available for one, two or three semester credits with on- or off-campus sponsors. They are repeatable to a maximum of four credits and may count only as general elective credit. Internship credits also count only as general elective credits. They are available only to seniors and must be taken only for 12 semester credits (requiring the internship to be the equivalent of a full-time position for an entire semester). Additionally, the internship option requires an overall 2.70 grade point average and a 3.00 grade point average in the major. The Department's "Guide to the Preparation of Internships" serves as an outline of procedures and requirements for an internship. Students are permitted to seek their own positions for either option or to select one from the many opportunities already listed with regional communications organizations.

General Information

All communications students must have a 2.00 grade point average to declare the major or minor and enroll in any courses above the 100 level.

Additional expenses for the communications student normally include production materials for audio, video and graphics courses. These expenses are part of the following courses: Communications 125, 135, 348, 408 and incidentals in other courses.

The Department of Communications makes recommendations to students for courses to complete the College Core. Courses have been chosen to aid in the integration of the major with liberal arts studies. The student's checksheet specifies these suggestions.

Honors in the Discipline

The Department of Communications participates in the College Honors in the Discipline Program. For guidelines, students should consult the Department Chair.

Communications Courses

105 Fundamentals of Speech
4.00 credits. Basic instruction on developing poise and confidence in speaking. Emphasis is placed on verbal and nonverbal communications, research, outlining, speech preparation, use of visual aids, and the rudiments of group dynamics and discussion.

115 Media and Society
4.00 credits. An examination of the structures, functions, political, social and economic impacts of mass media in the United States. A goal is to help students make critical and analytical consumers of the mass media. **This course does not count in the Communications major or minor.*

120 Introduction to Communications
4.00 credits. Through history, application and practice, this course explores the field of communication in order to prepare students for the challenges of research, design and understanding for the Communication major. As an overview course, all areas of communication will be explored: public speaking, media, public relations, organizational and interpersonal. **This course is required of all Communications majors and minors.* Register by Instructor.

125 Media Design and Production
4.00 credits. Course provides the design, theory and development of production skills and techniques for a variety of audio-visual materials, photography and print materials. Students are required to participate in labs dealing with the operation and utilization of production equipment and the actual production of materials. A variety of computer applications is included. **Prerequisite: high school computer course or competency determined by the instructor.* Register by Instructor.

135 Publication Design and Graphics
4.00 credits. Course employs the principles of design, typography and other assorted methods of production to provide a foundation in the preparation of posters, newsletters, magazines, special interest publications, and graphics.

Elements of computer graphics are included and new media are explored. **Prerequisite: COM 125*. Register by Instructor.

145 CE Black-and-White Photography (ART 145)
4.00 credits. **(Creative Expression Core Course)** Photography will be dealt with as a photojournalistic form, promotional form and an art form. No prior knowledge or experience in the art of photography is expected. Demonstrations and supervised lab periods will be used to instruct students in basic camera and darkroom techniques of black-and-white photography. Individual and group critiques/discussions of student photography will be held. Discussion of photographic history, criticism and aesthetics will be used to help the student understand class projects and to increase appreciation of photographic traditions and contemporary trends.

210 Public Performance and Presentation
4.00 credits. Students become proficient at translating the written word into a professional oral performance. Exercises and projects develop competence in a variety of areas appropriate to any of the Communications concentrations that may be chosen by a major. This course is an advanced professional speaking course. This course allows students to experience various presentation formats with the focus on one organization. **Prerequisites: COM 120 and 125*. Register by Instructor.

211 Reporting and Newswriting for the Print Media
4.00 credits. An introductory study of news media and values with emphasis on effective reporting, clear writing and meeting deadlines. Accuracy, fairness and logic in preparing stories under conditions similar to those encountered by professional journalists is stressed. Expectations of journalistic writing standards for newspapers and news magazines, from news briefs to feature-length news articles, are addressed. **Prerequisite: COM 120*. Register by Instructor.

220 Audio Applications and Techniques
4.00 credits. The technical and aesthetic fundamentals of the radio industry and audio production fields are explored in this course, including an advanced examination of writing and production materials for radio/audio programming. An in-depth analysis of the audio medium, including commercials, news, documentaries, digital editing and special programs, will be undertaken. Through the development of analytical, technical and critical skills, the student will become knowledgeable in writing and producing a complete range of audio projects. A general overview of the history of audio broadcasting is included. Students are required to purchase production materials for the course. **Prerequisites: COM 120 and 125*. Register by Instructor.

230 Video Applications and Techniques
4.00 credits. The technical and aesthetic fundamentals of the television industry and video production fields are explored in this course, including an advanced examination of writing and production materials for television/video programming. An in-depth analysis of the video medium, including commercials, news, documentaries, digital editing and special programs, will be undertaken. Through the development of analytical, technical and critical skills, the student will become knowledgeable in writing and producing a complete range of video projects. A general overview of the history of video broadcasting is included. Students are required to purchase production materials for the course. **Prerequisites: COM 120 and 125*. Register by Instructor.

248 Communication Law and Ethics
4.00 credits. An examination of the law related to the field of communications as well as its history and effects. Current ethical issues are explored through case studies. Analysis of legal and ethical issues affecting the media, including the First Amendment, defamation, privacy, news gathering, obscenity, copyright and broadcasting/telecommunications, and the views of philosophers from Socrates to the present. **Prerequisite: COM 120*. Register by Instructor.

251 International Communications
4.00 credits. The course is an examination of the systems of communication around the world. It is designed to examine the human experience as an American by exploring the sociocultural, economic, political and scientific/technical impact of communication. Spring semester.

252 HUM Multi-Cultural Communications
4.00 credits. **(Humanities Core Course)** The course is designed to study issues of diversity and the media by investigating the audience, content and institutions of communications. Cultural perceptions will be explored as they relate to an individual's beliefs on diversity such as: race, ethnicity, gender, sexual orientation, religion, age, class and disability. A research and field experience will challenge students to analyze and formulate their own views. Fall semester.

301 Interpersonal/Group Communications
4.00 credits. The goal of this course is to help students become better communicators. We seek to introduce students to a wide array of perspectives on interpersonal communication and encourage students to enlarge their understandings of the theory and practice of interpersonal communication. **Prerequisite: COM 120*. Register by Instructor.

304 Persuasion
4.00 credits. The theories and techniques of persuasion are explored from the perspective of the persuader and the audience. Topics include ethics, social

responsibility, and motivation of persuasion; the techniques of nonverbal communication and mass appeals. **Prerequisite: COM 120*. Spring semester, even-numbered years. Register by Instructor.

310 Digital Media Convergence and Design
4.00 credits. This course is an examination of convergence in mass media and how that convergence impacts website design. Through theory, application and practice, students will learn about media convergence and its place in the new media landscape. Emphasis will be placed on proper design and evaluation of websites. **Prerequisites: COM 120, 125, 135 and 211*. Register by Instructor.

315 Writing for New Media
4.00 credits. Writing for new media will be emphasized in this course. New media includes, but is not limited to, online newspapers, online television, blogs, wikis, and streaming audio and video. The fundamentals of good media writing and reporting will be emphasized and built upon in this course. Current trends in new media writing also are examined. **Prerequisites: COM 211, 220 and 230*. Register by Instructor.

316 Broadcast News and Copy Writing
4.00 credits. This course serves as an introduction to the styles and techniques of writing for the broadcast media. Emphasis is given to conceptualizing, writing and editing news copy for television and radio as well as copy for commercial and public service campaigns. **Prerequisites: COM 211, 220 and 230*. Spring semester. Register by Instructor.

333 Organizational Communication
4.00 credits. Through theory, application and practice, this course explores aspects of organizational communication in order to prepare students for the challenges of organized activity at work, in the community, and in the family. **Prerequisite: COM 120*. Register by Instructor.

336 Advanced Video Production
4.00 credits. Advanced technical and aesthetic fundamentals of field and studio production and postproduction will be explored. Students continue to develop skills and knowledge in video production acquired in basic production. The emphasis of this course is on the broadcast aspects of production, and students create productions that will air on the student-run television station. Students work in both individual and group settings. **Prerequisites: COM 220 and 230*. Spring semester. Register by Instructor.

348 Advanced Media Production
4.00 credits. Advanced level skills in the conceptualization, design, development and management of communications media in the areas of photography,

multi-image cyberspace, and computer graphics. Students are required to participate in laboratory experiences dealing with the production of photography, multimedia and computer graphics at the advanced level. The basic and advanced theories of color, design and interactivity will be explored to aid the student in the creative production of communications materials. **Prerequisites: COM 220 and 230.* Fall semester. Register by Instructor.

351 Public Relations
4.00 credits. A study of the theory and practice of public relations, its role in administration, its role in society, and its potential as a career. Course content addresses strategies and tactics of public relations in commercial, nonprofit and government organizations. **Prerequisite: COM 311.* Fall semester. Register by Instructor.

358 Introduction to Marketing Communications
4.00 credits. Skills are provided in blending concepts and applications of marketing communications that integrate advertising, public relations, sales promotion and other organizational efforts into a strategic viewpoint in a global/international environment. Students are taught from an integrated marketing communication perspective with respect to planning, implementation and control of marketing communication campaigns. **Prerequisite: Declaration of marketing communications concentration in the Department.* Spring semester. Register by Instructor.

370-378 Special Topics in Communications
4.00 credits. Periodic offerings of the Department or directed study in topics of special interest to advanced majors. These courses generally count as concentration elective credit as determined by the Department faculty. Register by Instructor.

408 Systems Approach to Organizational Training
4.00 credits. The course studies the theory and application of instructional systems design techniques to corporate and organizational training problems. In addition to designing a training program, interactive computer techniques will be used to solve training problems. **Prerequisites: COM 220 and 230.* Spring, odd-numbered years. Register by Instructor.

412 Advanced Public Relations
4.00 credits. The course provides an opportunity for students to build upon knowledge, skills and expertise in public relations by applying them to the study of actual public relations cases. The analysis and evaluation of actual public relations practice lead the student to a better knowledge of public relations principles, application and management in the profession. Agency projects enhance the application of advanced public relations practices. **Prerequisite: COM 351.* Spring semester. Register by Instructor.

422 Media Management
4.00 credits. This course examines the structure and function of media companies and corporations, including broadcasting and print organizations. Emphasis is placed on management styles and principles as they apply to the specific requirements and public responsibilities of the media. **Prerequisites: COM 220 and 230.* Fall semester, odd-numbered years. Register by Instructor.

424 Script and Screenwriting
4.00 credits. Emphasis is placed on identifying the tools used in successful creative writing and then putting them into practice. Students become familiar with, through study and practical application, the various visual/audio formats used in dramatic and documentary television and film writing. **Prerequisite: COM 211 or permission of the instructor.* Fall semester, even-numbered years.

426 Broadcast Programming and Promotions
4.00 credits. An examination of the programming and promotions philosophies and practices of the radio, television and cable industries. **Prerequisite: COM 316.* Spring semester, odd-numbered years. Register by Instructor.

471-473 Practicum
Variable (1.00 to 3.00) credit(s). Supervised application of previously studied theory by professionals in the field of the student's concentration. Practicum with an on-/off-campus sponsor may be used for free elective credit only, repeatable to a maximum of four credits within a major or minor declaration. **Prerequisites: at least sophomore standing, majors/minors only.* Graded Pass/No Pass. Fall semester. Register by Instructor.

474 Communications Internship
12.00 credits. Supervised application of previously studied theory by professionals in the field of the student's concentration. **Prerequisites: senior standing, majors only, 2.70 cumulative grade point average with a 3.00 grade point average in the major.* Must be taken for a full semester off campus for free elective credit only. Register by Instructor.

480-484 Independent Study in Communications
Variable credit. A specially-designed course, unique to each student, allowing the individual the opportunity to pursue scholarly and practical work in the area of major interest under the guidance of members of the Communications faculty. Specific goals and objectives permit the student to complete special projects, literature reviews and research papers. **Prerequisites: at least junior standing, scholarship requirement, and approval of Independent Study Committee.* Register by Instructor.

485 Communications Seminar
4.00 credits. A capstone course providing an integration of course work, knowledge, skills and experiential learning to enable the student to demonstrate a broad mastery of professional expectations for a promise of initial employability, further learning and career advancement. Critical thinking, creative thinking, problem solving strategies, effective written and oral communication, quantitative and qualitative analysis, computer literacy, library competency, and mediated communication related to a student's concentration and specific career plans is employed. **Prerequisite: senior standing.* Majors only. Register by Instructor.

Department of Computer Science (B.S.)

Hughes (Chair), Evans-Waughen, Leap, Wunderlich, Zlatarova

The advent of high-speed machines with enormous capacity for gathering, processing, storing, retrieving and communicating information affects nearly every aspect of our professional and personal lives. Courses in computer science encourage the exploration and understanding of this social and technological phenomenon. Survey courses are offered for those who wish to understand in broad social contexts the nature of the computer and its effect on our lives and on society. Programming language courses are offered for those who need to become skillful users of the computer. Advanced study in theory, hardware, software and applications is provided for all computing majors and for those who want to use the computer effectively and knowledgeably in another discipline. Advanced courses relate closely to the curricula in business, natural and social sciences, engineering and mathematics. Students are encouraged to develop simultaneous strengths in computing and in a discipline in which the computer is used as a tool.

Majors Offered

The Department offers majors in **Computer Science**, **Information Systems** and, in conjunction with the Department of Physics and Engineering, **Computer Engineering**. Each major provides a strong curriculum from which a professional career may be launched or a graduate program pursued.

The Department strongly recommends that all students intending to major in computing sciences purchase their own Microsoft Windows-based personal computer.

Bachelor of Science in Computer Science

The **Computer Science major** requirements are: Computer Science 121, 122, 221, 309, 322, 332, 341, 421 or 422, 490 and two computer science elective courses at or above the 200 level; Mathematics 121, 122 and 201.

Bachelor of Science in Information Systems

The **Information Systems major** requirements are: Computer Science 121, 122, 205, 221, 230, 240, 309, 310, 341, 342, 409 and 490; Mathematics 251; Business Administration 265 and 333**.**

Bachelor of Science in Computer Engineering

Refer to the Department of Physics and Engineering for the **Computer Engineering major** requirements.

Minors Offered

The Department offers minors in **Computer Science** and **Information Systems** that enable majors in other disciplines to obtain recognition for course work in these areas. Department faculty help tailor the elective course selections to meet individual needs of students pursuing a minor.

The **Computer Science minor** requirements are: Computer Science 121, 122, 221 and two computer science courses from the Computer Science major requirements at or above the 200 level.

The **Information Systems minor** requirements are: Computer Science 121, 240, 309, 341 and one additional Computer Science course from the Information Systems major requirements at or above the 200 level.

Honors in the Discipline

The Department of Computer Science participates in the College Honors in the Discipline Program. For guidelines, students should consult the Department Chair.

Computer Science Courses

120 Introduction to Computer Applications
4.00 credits. Provides students with an applied understanding of how software is used to visualize, analyze and exchange business information. The technology layer provides an opportunity to create real-world applications used in different business areas. The course covers the strategic use of information systems and technology in business including: the design of spreadsheets for business information analysis, application software to analyze business problems, database software for creating and using information systems, the integration of information from multiple software platforms, and ethical and moral issues in information systems and the Internet.

121 MA Computer Science I
4.00 credits. **(Mathematics Core Course)** The fundamental concepts of computer organization, machine-level representation of data, algorithmic development and structured programming are presented with an emphasis on the syntactic and execution characteristics of an object-oriented programming language, including data types; arithmetic operators and assignment; input/output, selection and iteration constructs; elementary data structures; and procedural abstraction.

122 Computer Science II
4.00 credits. A continuation of the presentation of the computer software essentials. The course surveys fundamental data structures for information processing and corresponding algorithm construction. The implementation of these data structures is considered. Additional topics include recursion, file processing, classes and advanced object-oriented programming techniques. **Prerequisite: CS 121.*

205 Visual Programming
4.00 credits. Introduction to object-oriented, event-driven Windows programming to solve problems. Emphasis is on the design perspective of the visual interface for data-entry screens concentrating on data accuracy, storage and processing. **Prerequisite: CS 121.* Spring semester.

221 Algorithms and Data Structures (EGR 221)
4.00 credits. The design of algorithms for handling abstract data types, including stacks, queues, linked lists, trees and graphs is coupled with an introduction to complexity analysis, storage allocation and management. **Prerequisite: CS 122.* Fall semester.

230 Microcomputer Architecture (EGR 230)
4.00 credits. Board-level design of microcomputers and the study of various computer architectures and hardware/software computing platforms. Topics include computer ethics, hardware components such as memory registers, central processor types, controllers, peripherals, input/output architecture and devices, memory management, and networking. **Prerequisite: CS 122.* Spring semester.

240 Information Systems
4.00 credits. A study of the development of information systems in the new and changing global environment. It provides knowledge about the nature of information and its use in managerial decision making; the role of information systems within organizational strategy; the way that information is organized, stored and processed by modern information technology as viewed from the interest of the business user; and how developments in networks and the Internet have made an impact on business. Practical skills in using database management

systems and other software tools for information system design and development are provided. Fall semester.

309 Database Systems
4.00 credits. An introduction to concepts of databases and database management systems including the storage, processing, evaluation, display and security of data. The course represents a study of the database logical and physical design; of the basic management techniques using the most popular data languages, SQL and QBE; and of the different methodologies for database development: the relational approach and the object-oriented approach. Practical skills to create concrete databases and the corresponding information systems using some of the most used software products (Oracle, MS SQL Server, MySQL and MS Access) are considered. **Prerequisite: CS 120 or 121.* Fall Semester.

310 E-Commerce Applications Programming
4.00 credits. A study of the architecture and functionality of the Internet and the World Wide Web, including the effects on the way business transactions now occur followed by an in-depth study of website design, including comprehensive coverage of XHTML and the establishment of an interactive website for conducting reliable web-based transactions. Client-side webpage programming in JavaScipt, server-side programming using PHP, ASP and CGI, and interfacing with the databases are included. **Prerequisite: CS 221.* Fall semester.

322 Formal Methods
4.00 credits. Topics include those associated with discrete mathematics as they apply to computing sciences, including induction and recursion in algorithms, graph theory in paths, trees and local area networks. A discussion of grammar classifications, finite-state machines, and push-down automata emphasizing context-free grammars and their use in parsing programming languages. **Prerequisite: CS 221.* Spring semester, alternating years.

332 Computer Organization and Architecture (EGR 332)
4.00 credits. Introduction to Boolean algebra, design of combinational and sequential circuits, and their use in von Neumann computer architecture. Basic parts of computer systems including memory, control and input-output systems are studied. The student is expected to design a simple micro-programmed computer. **Prerequisite: CS 221.* Fall semester.

333 Digital Circuits and Computer Interfacing (EGR 333)
4.00 credits. Digital logic and integrated circuits to implement logic; architecture and machine-language programming of mini-computers and microprocessors; design, testing and construction of instrument-to-computer and computer-to-instrument interfaces; design and testing of supporting software. Hours: lecture 3,

laboratory 3. **Prerequisites: CS 122 and 332, or permission of the instructor.* Spring semester, odd-numbered years.

341 Systems Analysis and Design
4.00 credits. An introduction to system development methodologies, systems analysis, detailed systems design, database design, user interface design, testing, documentation and development of information systems. Knowledge and skills in using CASE tools, different software packages, commercial DBMSs, UML, MS Visio, and MS Project to create, organize, process and visualize their data is gained. **Prerequisite: CS 120, 121 or 240.* Fall semester.

342 Computer Networks and Networking Systems
4.00 credits. Theory and knowledge of computer networks, the operation of the network, the characteristics of network architecture as it relates to the ISO model and administration, and the security and management of networks are provided. Other topics include network hardware requirements, such as routers, repeaters, gateways, interface cards, file servers, network topology options, and the Internet. **Prerequisite: CS 122.* Fall semester.

344 Simulation
3.00 credits. Fundamentals of modeling. Applications are programmed in higher-level languages as well as a specialized simulation language. **Prerequisites: CS 221 and MA 122, or permission of the instructor.*

361 Computer Graphics
3.00 credits. Overview of the principles of computer graphics, including the basis of raster and vector display devices; representation of lines, curves and two- and three-dimensional scaling; hidden lines and surfaces; and animation techniques involving interactive graphics and the user interface. **Prerequisites: CS 221 and MA 201.*

362 Comparison of Programming Languages
3.00 credits. Comparative study of programming language concepts, including data objects and data types, scope, procedures, abstraction mechanisms, sequence control, exception handling and concurrence, and providing a framework for understanding language design. Intended to provide the necessary tools for critically evaluating existing and future languages and language constructs. **Prerequisite: CS 221.*

370-378 Special Topics in Computer Science
4.00 credits. A course designed to allow students to examine topics and problems of current relevance in computer science. **Prerequisite: permission of the instructor.*

409 Database Systems Development and Applications
4.00 credits. A study of advanced database systems, data warehousing, and data mining. The XML language is considered as a data exchange tool. Security and privacy aspects in databases are discussed. The WWW is used as a database application platform to create web-driven databases working with different visual environments and commercial DBMSs. Practical skills in the design and development of information systems and their application are involved. **Prerequisite: CS 309*. Spring semester, alternate years.

421 Compiler Design
4.00 credits. Design and construction of system software such as compilers, interpreters and assemblers. Topics include command and statement parsing techniques, symbol tables, code generation and code optimization. A project involving design and construction of a working systems program is assigned. **Prerequisites: CS 221, 322 and 332*. Spring semester, alternate years.

422 Operating Systems and Systems Programming (EGR 422)
4.00 credits. Principles and theories behind the design of operating systems and their practical implementation, including executives and monitors, task handlers, scheduling algorithms, file handlers, device drivers and interrupt handlers, theories of resource allocation and sharing, multiprocessing and interprocess communication. **Prerequisites: CS 221 and 332*. Spring semester.

433 Advanced Computer Engineering (EGR 433)
4.00 credits. Circuit-level design and implementation of complete computer systems. Major laboratory projects require students to design, build, test and demonstrate computer hardware designs using Field Programmable Gate Arrays and bread boarded circuits. Class lectures include design of embedded systems, microcontrollers, microprocessors and supercomputers. Hours: lecture 3, laboratory 3. **Prerequisites: CS 221, EGR 332 and EGR 333*. Spring semester, even-numbered years.

434 Artificial Intelligence and Robotics (EGR 434)
4.00 credits. Robotics and machine intelligence including symbolic Artificial Intelligence (AI) and artificial neural networks. Symbolic AI uses programmed heuristics and forms of knowledge representation. Artificial neural networks are connectionist computer architectures where many computational nodes are connected to solve problems requiring rapid adaptation or where governing equations are not known or cannot be easily computed. Course includes mobile-robot and robotic-arm theory, applications, simulations, real-time control and path-planning strategies. **Prerequisites: CS 121 and MA 121*. Fall semester, odd-numbered years.

471 Internship in Computer Science
4.00 credits. Work experience designed to supplement course work. By working for

business, school or government, the student gains valuable knowledge unavailable from textbooks. Graded Pass/No Pass. Register by Instructor.

480-489 Computer Science Independent Study
3.00 credits. Independent study and research on a problem or topic in the field of computer science. **Prerequisite: approval of the Independent Study Committee.* Register by Instructor.

490 Readings and Projects in Computing
4.00 credits. A directed project or study requiring faculty acceptance of a proposal with a final report and defense of work. **Prerequisite: senior status.* Register by Instructor.

Department of Education (B.A., B.S.)

Tyminski (Chair), Coyle, Finley-Bowman, Jones, Myers, Pitcher, Staulters, Toro

Undergraduate Programs

Elizabethtown College, through its Department of Education, offers several programs leading to a bachelor's degree and Pennsylvania certification. These include a major program leading to a Bachelor of Science degree and Pennsylvania certification in **Elementary Education** (K-6). The completion of an **Early Childhood Education concentration** (N-3) with this major results in certification in both Elementary and Early Childhood Education. The completion of the **Special Education concentration** with this major adds Special Education certification. **Urban Education** and **Behavior Management concentrations** are also available.

The programs in **Elementary Education** combine strong attention to the liberal arts and sciences with the development of high professional competence. Supported by the Core Program, a required minor or concentration, and elective course work, these major programs creatively bring together the student, the school and the subjects to be taught. Further, the Department stresses the importance of supervised field experiences that complement on-campus courses in education.

Programs in **Secondary Education** are available in selected academic areas (English, Mathematics, Biology, Chemistry, Physics and special interdisciplinary majors in Social Studies and General Science). Carefully designed work in the academic or interdisciplinary major, the Core Program and electives qualify students for the degree appropriate to that major and for Pennsylvania certification for grades 7 through 12 in that subject. Majors and Pennsylvania certification are available in Music Education (K-12) and Art Education (K-12). In-depth work in

the major teamed with completion of the Core Program and elective courses leads to the awarding of the degree and certification. (See Department of Fine and Performing Arts for more information.)

Certification

The Department and College act as an agent of the Commonwealth of Pennsylvania in the teacher certification process for those meeting all appropriate standards.

General Requirements of the Undergraduate Programs

Admission to the Programs

Students must make an electronic application to the Department of Education for provisional acceptance into a certification program after they:

Complete 27 hours with a cumulative grade point average 2.80 or higher.

Complete at least two courses with ED prefixes with grades of C or better.

Submit a TB medical clearance less than two years old.

Provide a record of Act 34, Child Abuse and FBI criminal record clearances.

Declare an approved major and an acceptable minor or concentration, where required.

Provide a portfolio for review demonstrating interest and/or experience in professional education and progress toward meeting required competencies.

Approval of the Education Department and any other appropriate major Department is necessary for the application to be successful. Students are evaluated at the conclusion of each subsequent semester and may be advised or required to withdraw at any time the Department determines such action to be appropriate.

Progress in the Programs

Students must make an electronic application to the Education Department for formal acceptance into a certification program after they:

Complete 54 hours with a cumulative grade point average of 3.00 or higher.

Complete at least three courses with ED prefixes.

Receive passing scores for Pennsylvania certification on the tests of background knowledge and communication skills required by the Pennsylvania Department of Education: PPST Reading, PPST Writing and PPST Mathematics.

Formally present an electronic or paper portfolio demonstrating continuing interest, experience and growth in professional education and progress toward meeting required Department competencies.

Approval of the Education Department and any other appropriate major Department is necessary for the application to be successful. Students are evaluated at the conclusion of each subsequent semester and may be advised or required to withdraw at any time the Department determines such action to be appropriate.

Exit from the Programs

Students seeking **award of the degree in the major only, without certification**, must:

Receive approval of the Education Department and any other appropriate Department(s) for completion of their degree plan.

Satisfy all requirements of the major – except the professional internship and Pennsylvania certification test results – with a cumulative and major grade point average of 2.00 or higher.

Complete a College-approved minor or Department concentration, where required, with a minimum grade point average of 2.00.

Complete an alternative internship experience of at least six credits, as approved by the Department of Education.

Students seeking **award of the degree in their major AND certification** must:

Satisfy all requirements of the major with the cumulative grade point average of 3.00 or higher.

Earn a grade of Pass (P) in the professional internship.

Complete a College-approved minor or Department concentration, where required, with a minimum grade point average of 2.00.

Earn passing scores for Pennsylvania on the appropriate specialty area test(s) of the Praxis II series. Students completing the Early Childhood, Elementary Education, Special Education, Music Education and/or Art Education programs also successfully must complete the Fundamental Subjects: Content Knowledge test.

Formally and publicly present a portfolio summarizing activities and experiences in professional education and demonstrating satisfaction of all required competencies.

Receive approval of the Education Department and appropriate major Department(s).

Arrange for Praxis test score label(s) to be sent to the Education Department showing passing scores on all required tests.

Submit the application for Pennsylvania certification to the Education Department.

The Professional Internship

Throughout its programs, the Department stresses the importance of supervised field experiences, which complement on-campus course work in education. The full-time professional internship, student teaching, is the capstone experience of the various teacher education programs. During this activity, there is a developmental process at work, which is designed to lead to the professional and personal growth required to enter the profession. The belief of members of the program faculty is that the success of this experience is enhanced when students have the opportunity to work under the supervision and mentoring of experienced College faculty familiar with their previous and ongoing development.

Student teachers are placed in cooperating school districts in the local area and supervision is conducted by College faculty or individuals who work in the education field. These individuals are retired education professionals, principals or superintendents with extensive supervisory experience. Requests for exceptions to this policy must be presented formally to the clinical faculty and staff of the Department as a group. To receive such an exception, students must demonstrate convincingly that an alternative placement decidedly would be more beneficial to their professional and personal development than completing the experience at a local site. Convenience or increased visibility for job searching are not considered important enough to earn an exception to Department policy.

Note: No courses may be taken concurrently with Education 470 (Internship) and Education 490 (Exit Defense of Professional Portfolio) without the written permission of the Education Department.

Honors in the Discipline

The Department of Education participates in the College Honors in the Discipline Program. For requirement information, consult the Department Chair.

Special Requirements of the Programs

Bachelor of Science in Elementary Education

Candidates for certification in Elementary Education – and related concentrations and/or certification sequences in **Early Childhood Education**, **Special Needs Education**, **Special Education**, **Behavior Management**, and **Urban Education** – must complete a major that consists of two key elements. The first of these emphasizes critical concepts and ideas important to one's general education and academic preparation for teaching. The second stresses both the content and process of helping others learn such important subject matter.

Three tracks are available to demonstrate mastery of these two components:

Track One requires successful completion of any other College-approved major program and the series of courses required for Elementary Education. This path leads to a dual major in Elementary Education and in the other major. Because it produces a major in another field along with certification in Elementary Education, this program possibly will require more than the standard eight semesters of baccalaureate work.

Track Two requires successful completion of a specially designed liberal arts major emphasizing content critical to the general education of a person with interest in helping children learn, the series of courses in educational content and pedagogy detailed on the following pages, and any College-approved minor. With careful advising, planning and course selection, this major routinely should be completed during a traditional four-year time period.

Track Three requires successful completion of the same specially designed content major and the same course work in pedagogy as is mentioned above. Additionally, it requires completion of an education-related concentration. Concentrations include: **Behavior Management**, **Early Childhood Education**, **Special Needs Education**, **Special Education**, and **Urban Education**. This program also should be completed as part of a four-year, full-time college experience.

Unless otherwise noted, each of the following courses counts for four credits.

Candidates for certification in **Elementary Education** also must complete the following courses in educational content and pedagogy: Education 105, 150, 210 (2 credits), 241, 250, 258, 272, 282, 325, 335, 346, 365, 470 (12 credits), 490 (one credit) and one elective course in Education (two, three or four credits).

Candidates for certification in **Elementary Education in tracks two or three** additionally are required to complete at least one College-approved minor or one or more of the following concentrations. At least eight of the credits required for the concentrations must be taken on the Elizabethtown College campus.

Behavior Management: Education 272, 274, 362, 364 and approved student teaching.

Early Childhood: Education 215, 320, 361, an approved early childhood elective, and 470EC (12 credits).

Special Needs: Education 285, 290, 293 and an approved special needs elective.

Special Education: Cognitive, Behavior, Physical/Health Disabilities, N-12 certification must complete all of the degree and certification requirements of the Elementary Education program and additionally must complete the following courses: Education 285, 290, 293, one special needs elective and Education 470SE (12 credits).

Urban: Education 270 (three credits), 332 (three credits); Sociology 220 or 301; one approved urban education elective (Social Work 160, 280, or 357); and Education 470UE (12 credits).

In completing the above requirements or in addition to these requirements, all candidates for Elementary Education certification must complete two courses in English (one in writing and one in literature) and two courses in mathematics.

Bachelor of Science or Bachelor of Arts in Secondary Education

Students seeking Secondary Education certification may elect to complete either a minor(s) or a concentration(s) in behavior management, special needs education, or urban education. Students must obtain approval to complete this additional concentration. Due to rotation of courses, there is no guarantee that an additional concentration can be completed in eight semesters.

Unless otherwise noted, each of the following courses counts for four credits.

In addition to requirements for a specific major or interdisciplinary program, candidates for certification in Secondary Education also must complete the following courses in educational content and pedagogy: Education 105, 150, 241, 282, 305, 470 (12 credits) and 490 (one credit).

In completing the above requirements or in addition to these requirements, candidates for Secondary Education certification must complete two courses in English (one in writing and one in literature) and two courses in mathematics. Students seeking Secondary Education certification may elect to complete either a minor(s) or concentration(s) in behavior management, special needs education, or urban education. Students must obtain approval to complete this additional concentration. No more than four credits of a concentration may be completed off campus. Due to rotation of courses, there is no guarantee that an additional concentration can be completed in eight semesters.

Elizabethtown College is in compliance with Title II of the Higher Education Act and disclosure reporting. Requests for disclosure information – i.e., teacher preparation programs, successes on passing state licensing and certification examinations, and job placement – may be obtained by contacting the Education Department.

Education Courses

105 Foundations of Education
4.00 credits. A study of the historical, philosophical, sociological and political foundations of education. Emphasis is on critical understanding of educational thought and practice in order to identify, interpret and search for resolution of educational controversies and problems.

150 Child and Adolescent Psychology
4.00 credits. A study of factors underlying teaching and learning processes, including human growth and development, exceptionality, multiculturalism, motivation, teaching and learning theory, and context specific analysis. Includes field experience, which will require FBI Clearance, Pa. Criminal Clearance, and Child Abuse Clearance (fees).

210 Children's Literature
2.00 credits. This course takes an in-depth look at the literary genres represented in quality literature written and illustrated for children and adolescents. Participants will become familiar with various authors, poets and illustrators of children's literature. Students also will develop criteria for evaluation of authors and illustrators and will build a personal list of favorite books and literature experiences to use in classrooms. **Prerequisites: ED 105 and 150 and corequisite: ED 250.* Register by Instructor.

215 Early Childhood Education
4.00 credits. A study of programs for young children with regard to theoretical bases, curricular goals, teacher role, physical environment and program sponsorship. **Prerequisites: ED 210 and 250*. Register by Instructor.

241 ESL: Linguistic and Cultural Diversity in the Classroom
3.00 credits. An experiential approach to studying linguistic and cultural diversity in the classroom. Students will examine sociolinguistic aspects of U.S. and world cultures in K-12 settings and learn strategies for creating classrooms that promote equity and an appreciation for diversity. **Prerequisites: ED 105 and 150*. Register by Instructor.

242 The Use of Sign Language with People with Multi-Disabilities
2.00 credits. A practical sign language course for persons interested in special education. Information covered includes: 1) sign language and other alternative communication systems, 2) adaptive signing techniques, 3) developmental processes involved with signing, 4) how to choose a sign/sign system, and 5) basic core vocabulary for use with people with developmental disabilities in their environments (i.e., sheltered workshops, special school settings, group homes, etc.). **Prerequisites: ED 105 and 150*. Register by Instructor.

250 Foundations of Literacy
4.00 credits. A study of emergent literacy and strategies for teaching beginning reading in an integrated language arts curriculum. Requires field experience. **Prerequisites: ED 105 and 150 and corequisite: ED 210*. Register by Instructor.

258 Educational Assessment and Evaluation
4.00 credits. Examines current issues, trends and practices in educational assessment. Emphasizes the study of different assessment and evaluation procedures in the early childhood, elementary and secondary classroom. Explores a variety of traditional and innovative approaches to assessment of student learning and development. **Prerequisites: ED 210 and 250, or permission of the Department*. Register by Instructor.

260 Creative Activities in Early Childhood Education
4.00 credits. A study of the developmental stages of creativity in the young child. Includes planning, implementing and evaluating creative activities in art, music, movement and dramatic play. **Prerequisites: ED 210 and 250*. Register by Instructor.

261 Integrated Technology I
2.00 credits. An introductory study of current and emerging instructional media and technologies used across the grades and curricula. Organizing time and records through technology and computer-mediated communications, including

basic multimedia presentation tools, are presented. Classroom-related features of Word and PowerPoint are practiced at an introductory level. Register by Instructor.

262 Integrated Technology II
2.00 credits. A study of current and emerging instructional media and technologies used across the grades and curricula. Computer-mediated communications – including advanced multimedia presentation tools, such as embedded video – are developed. Advanced classroom-related PowerPoint and webpage development techniques are practiced. Emphasis will be placed on use of SmartBoards, integration of K-12 student use of computers during instruction, use of handhelds, WebQuests, and videostreaming. **Prerequisite: permission from the Department based on demonstration of basic technology skills in Word and PowerPoint.* Register by Instructor.

270 Issues in Diversity and Urban Education
3.00 credits. A study of the social, economic, political, historical, curricular and evaluative issues that shape and constrain urban education. Multicultural and interracial understanding and education in the United States are explored through experiences in urban sites, including field trips and community-learning opportunities. **Prerequisites: ED 105 and 150.* Register by Instructor.

272 Foundations of Classroom Management
4.00 credits. An exploration of the elements of implementing a comprehensive classroom management plan and assessing its outcomes on student learning. The focus is on creating, applying and evaluating proactive measures, communication and relationship-building techniques, and effective responses to unproductive student behaviors. **Prerequisites: ED 105 and 150.* Register by Instructor.

274 Positive Classroom Climate: Models and Methods
4.00 credits. This course extends the basic principles of comprehensive classroom management through an in-depth examination of current methods and models that build positive classroom climates. Student also will demonstrate the ability to implement these methods and models with diverse learners as they assess the effectiveness of outcomes. **Prerequisites: ED 105 and 150.* Register by Instructor.

282 Introduction to Inclusion and Exceptionalities
4.00 credits. This course is an introduction to philosophical, historical and legal foundations of Special Education and inclusive education principles and practices. The history, etiology, characteristics and accommodations for students with special needs in the classroom setting will be examined. **Prerequisites: ED 105 and 150.* Register by Instructor.

285 Methods of Teaching Students with High Incidence Disabilities
4.00 credits. A study of the specialized instructional strategies to adapt and accommodate classroom environments, testing methodologies, and curricula to meet the needs of exceptional children and youth. Emphasis is on high incidence disabilities, such as learning disabilities, ADD/ADHD, emotional and behavior disorders, communication disorders, and cultural or linguistic diversity. Field experience is required. **Prerequisites: ED 210 and 250, or permission of the Education Department.* Register by Instructor.

290 Methods of Teaching Students with Low Incidence Disabilities
4.00 credits. A study of the specialized instructional strategies to adapt and accommodate classroom environments, testing methodologies, and curricula to meet the needs of exceptional children and youth. Emphasis is on low incidence disabilities, such as severe cognitive needs, low vision and blindness, hearing impairments and deafness, deaf-blindness, autism, severe health and physical disabilities, and traumatic brain injury. **Prerequisites: ED 210 and 250, or permission of the Education Department.* Register by Instructor.

293 Assessment in Special and Inclusive Education
4.00 credits. A study of the basic purposes and uses of various forms of assessment in Special and Inclusive Education. Emphasis is on basic uses of tests, important characteristics of good testing, legal and ethical consideration in assessment, and adapting tests to accommodate students with disabilities. **Prerequisites: ED 210 and 250, or permission of the Education Department.* Register by Instructor.

305 Methods of Secondary Education
4.00 credits. A study of the instructional methodology of an academic discipline under the guidance of a clinical professor in the academic major (e.g., science, English, mathematics). Field experience is required. **Prerequisites: ED 105 and 150.* Register by Instructor.

320 Special Methods in Early Childhood Education
4.00 credits. A study of developmentally appropriate procedures and materials for the preschool child, emphasizing the importance of play in Early Childhood programs. Field experience is required. **Prerequisites: ED 210 and 250.*

325 Science and Health in Elementary Education
4.00 credits. A study of science processes in an elementary school program and the utilization of multiple resources, organization, management, evaluation, instructional strategies, and integration of science and health in the elementary program. Field experience is required. **Prerequisites: ED 335, 346 and 365.* Register by Instructor.

330 Teaching Gifted and Talented Children
2.00 credits. A study of the processes of effectively teaching gifted and talented children in the regular classroom setting. Students will learn skills that will enable them to provide instruction designed to help meet the exceptional needs of gifted and talented children. **Prerequisite: ED 282*. Register by Instructor.

332 Seminar in Urban Issues
4.00 credits. Explores the issues of poverty, learning difficulty, homelessness, mental and physical health, urban schooling, and cultural and linguistic differences. Field experience is required. **Prerequisite: ED 270, or permission of instructor*. Register by Instructor.

335 Mathematics in the Elementary School
4.00 credits. A study of how children develop a background of understanding and skill in mathematics, concentrating on the development of problem-solving, reasoning, and communication skills in mathematics, and connecting mathematics and the real world. Additional focus will be on organization for instruction, alternative means of evaluation, and teaching special needs and at-risk students. Field experience is required. **Prerequisites: ED 210 and 250 and corequisites: ED 325, 346 and 365*. Register by Instructor.

346 Integrated Reading and Writing
5.00 credits. An in-depth study of research-based methods and strategies for designing and implementing effective language arts instruction in elementary schools. Students develop necessary skills to teach economically, academically, culturally, racially and linguistically diverse children. Coursework includes the study of integrated reading and writing strategies, implementation of curricular materials, evaluation and assessment practices, and current language arts policies. Field experience required. **Prerequisites: ED 210 and 250 and corequisites: ED 325, 335 and 365*. Register by Instructor.

361 Exploring and Understanding Play for Young Children
4.00 credits. A study of the theories of play as used in developmentally appropriate curriculum and methodologies. This course emphasizes previously learned theories of development and the implementation of play therapy and appropriate types of play for infants, toddlers, preschool and kindergarten children in inclusive settings. **Prerequisites: ED 105, 150 and 215*. Register by Instructor.

362 Understanding Mental Health Disorders in Students
4.00 credits. Focuses on recognizing symptoms of mental health disorders exhibited by some students in the classroom setting. Emphasis is placed on understanding the role of educators with regard to students diagnosed with

mental health disorders and implementing classroom strategies to support their academic success. **Prerequisites: ED 105 and 150.* Register by Instructor.

364 School Violence Prevention
4.00 credits. Explores the prevalence of violence and aggression in inclusive elementary and secondary school settings, the impact of unsafe schools on development and learning of children, and investigates research-based violence prevention and intervention methods. **Prerequisites: ED 105 and 150.* Register by Instructor.

365 Social Studies for Elementary Education
4.00 credits. A study of content, teaching strategies, materials, organizing approaches, and curricula for teaching social studies in the elementary school. Field experience is required. **Prerequisites: ED 210 and 250 and corequisites: ED 325, 335 and 346*. Register by Instructor.

371-378 Special Topics in Education
Variable credit. Topics chosen in response to student and faculty interests. Register by Instructor.

400 Senior Project in Education
2.00 credits. Students participating in the Department's Honors in the Discipline Program may register for this course during semesters in which research or writing for their project is being completed. Recognition for Honors in the Discipline is not assured by completion of this course. See Department Chair for additional information. **Prerequisite: invitation to Honors in the Discipline Program.* Register by Instructor.

470 Professional Internship
12.00 credits. Supervised student teaching for a full semester at the level of certification (Elementary or Secondary Education). **Prerequisites: completion of all program requirements with Education prefixes and cumulative grade point average required at the time of full admission to the program.* Note: Students who entered the College in fall 2005 or earlier will complete a 16-credit internship. Graded Pass/No Pass. Register by Instructor.

480-489 Independent Study in Education
Variable credit. Upon the initiative of the student, a program of study may be organized with a faculty member on a topic of mutual interest. **Prerequisites: approval of the Department Chair and the Independent Study Committee.* Register by Instructor.

490 Exit Defense of Professional Portfolio
1.00 credit. Public presentation and defense of professional portfolio for graduation and certification. **Prerequisite or corequisite: ED 470*. Register by Instructor.

Department of English (B.A.)

Martin (Chair), Adams, Downing, Harman, Hart, Isaak, Mead, Olson, Rohrkemper, Sarracino, Waters, Webster, Willen

The Department of English offers an education that stresses both the knowledge and effective use of language and an understanding and appreciation of literature. Excellence in both writing and literary studies is the fundamental aim of the Core Program and of the rigorous and comprehensive concentrations that prepare students for graduate training in English or professions such as law and medicine, for professional writing careers in a variety of fields, or for teaching at the secondary level of education.

Majors Offered

The English Department offers an **English major** with concentrations in **Literature**, **Professional Writing** and **Secondary Education certification in English.**

Bachelor of Arts in English

The **English Literature concentration** requires English 200; 220; 230; 240; one additional American literature course (240, 245, 251 or 440); one 300-level genre or themes course; one middle-digit 8 writing course (185-386) or English language course (302); one English elective (185 or higher); one 400-level authors seminar; and English 494.

Note: In the Literature concentration, one course (excluding Shakespeare) at the 300 or 400 level must be a pre-1800 British literature course. No course may satisfy more than one requirement for the major. Students may substitute an approved independent study (480-89) for one of the 300-level courses.

The **English Professional Writing concentration** requires English 185; 200 or 240; 220 or 230; one 300-level genre course; one 400-level authors course; one writing in the workplace course (282 or 285); one creative genres course (280, 281, 286, 287); one publishing course; one writing elective (283, 284, 302, 474); and English 493.

Note: In the Professional Writing concentration, one course from the periods, authors or genres category must be a pre-1800 British literature course (excluding Shakespeare). Students may fulfill their writing elective by completing a second course from the Writing in the Workplace category or the Publishing category.

The **English Secondary Education concentration** (English Education) requires English 185; 200; 220 or 230; two courses from the 240 series; 251; 302; 306; 403; one 300-level genre or themes course or 400-level authors seminar; one writing elective (middle-digit 8); and Education 105, 150, 241, 282, 305, 470 and 490.

English majors in all concentrations must complete the second semester of an ancient or modern language course at the 112 level or higher (if so placed).

Minors Offered

The Department of English offers a **Literature minor** and a **Professional Writing minor**. Each minor requires five courses (20 credits) distributed as follows:

The **English Literature minor** requires two courses from 200, 220, 230 or 240; one 300-level genre or themes course; one 400-level authors course; one elective in literature or writing, 185 or higher. Note: one 300-level or 400-level course must be a pre-1800 course.

The **English Professional Writing minor** requires English 185; two 200- or 300-level writing courses; one 200-level British or American literature course; one 300- or 400-level literature course.

Honors in the Discipline

The Department of English participates in the College Honors in the Discipline Program. For guidelines, students should consult the Department Chair.

English Courses

100 PLE Writing and Language
4.00 credits. **(Power of Language Core Course)** A writing course focusing on writing as a process of discovery concerning ideas, drafting, revising and editing. Students read, write and speak about a variety of aspects of the power of language. **Note: Students assigned to EN 100 may not enroll in EN 150 and those placed in EN 150 may not enroll in EN 100.*

101 CE Literature: Form and Performance
4.00 credits. **(Creative Expression Core Course)** Students gain a deep critical and experiential knowledge of various forms of literature both by reading them

and by writing or performing their own creations. Individual sections might focus on poetry, drama, Shakespeare, short story, film and the novel, or some combination of these. This course does not count toward the English major or minor.

104 HUM Introduction to Literature
4.00 credits. **(Humanities Core Course)** An introduction to a specific literary genre or combination of genres (drama, fiction or poetry) that emphasizes the nature of language and form and helps students make moral and aesthetic judgments. This course also may include a thematic focus. Since the course may vary in focus, it may be repeated for credit, provided the content is not duplicated. This course does not count toward the English major or minor.

150 PLE Advanced Writing and Language
4.00 credits. **(Power of Language Core Course)** A writing course designed to explore the writing process and the history of the English language, its past and present uses and powers. Students write, read and speak about a variety of aspects of the history and power of language. **Note: Students assigned to EN 100 may not enroll in EN 150 and those placed in EN 150 may not enroll in EN 100.*

180 CE Introduction to Creative Writing
4.00 credits. **(Creative Expression Core Course)** This course encourages students' creative work and develops their understanding and appreciation of three principal genres, fiction, drama and poetry. This course does not count toward the English major or minor.

185 Introduction to Professional Writing
4.00 credits. The varieties of discourse and research in professional writing, including instruction in basic terminology and graphic techniques. **Prerequisites: Power of Language – English requirement.* Register by Instructor.

200 Major British Writers
4.00 credits. A survey course designed to introduce majors to the literature of Britain, to important literary and historical concepts, and to the essential skills and methods of the discipline (such as close textual analysis, techniques for developing original and interesting theses, and basic uses of literary criticism). **Students in the literature and English Education concentrations should take this course as soon as possible after declaring an English major.* Spring semester.

220 WCH Pre-1800 British Literature and Culture WRI
4.00 credits. **(Western Cultural Heritage Core Course)** A study of the literature and culture of Britain before 1800, with an emphasis on the literary forms, philosophy, cosmology, sexual roles and political events of this important period of growth in English literature. This course focuses on Medieval, Renaissance or Neoclassical literature. Since the course may vary in focus, it may be repeated

for credit, provided the content is not duplicated. **A Writing and Research Intensive Course.*

230 WCH Post-1800 British Literature and Culture WRI
4.00 credits. **(Western Cultural Heritage Core Course)** An examination of post-1800 British poetry, fiction and nonfiction prose in historical and cultural contexts. Each section of the course will cover writers from one or more periods: the Romantic period (e.g., Blake, Wordsworth and Keats); the Victorian period (e.g., Dickens, Charlotte Bronte, Tennyson and Browning); and the Modern period, 1900 to the present (e.g., Woolf, Yeats, Joyce and Achebe). Since the course may vary in focus, it may be repeated for credit, provided the content is not duplicated. **A Writing and Research Intensive Course.*

240 WCH American Literature and Culture WRI
4.00 credits. **(Western Cultural Heritage Core Course)** A study of the literature and culture of America from the beginnings to modern times. Each section of the course covers writers from one or more periods: the Romantic period; the Realist period; and the Modern period. **Since the course may vary in focus, it may be repeated for credit, provided the content is not duplicated. *A Writing and Research Intensive Course.*

H243 HNR WCH American Visions: Cultural Dialogue in the U.S WRI
4.00 credits. **(Western Cultural Heritage Core Course - Honors)** A study of American cultural history with an emphasis on how popular culture, political and social history, and the fine arts reveal new ways of understanding American fiction in transitional eras. **A Writing and Research Intensive course.* Register by Instructor.

245 HUM Growing Up in America WRI
4.00 credits. **(Humanities Core Course)** Through a careful reading of important American novels and biographies, students will better understand the distinct experiences that comprise growing up in America. Both the uniqueness of experiences of growing up in America and the universality of shared problems, crises, challenges and joys are explored. **A Writing and Research Intensive Course.*

251 HUM Multicultural Literature WRI
4.00 credits. **(Humanities Core Course)** An examination of poetry, fiction, drama and nonfiction prose from cultures traditionally marginalized because of ethnic and racial differences. The course investigates the historical role and context of American and world authors such as Frederick Douglass, Jean Toomer, Sherman Alexie and Sandra Cisneros, as well as the values evident in their work. **A Writing and Research Intensive Course.*

H252 HNR HUM Irony, Humor, and Despair in Modern Literature WRI
4.00 credits. **(Humanities Core Course – Honors)** An exploration of the relationship among several quintessential modern writers and an investigation of their use of humor and irony to stave off despair and affirm at least the value

of artistic creation and the need for each of us to assert meaning in life. **A Writing and Research Intensive Course.* Register by Instructor.

H253 HNR WCH Gaelic and Anglo-Irish Ireland
4.00 credits. **(Western Cultural Heritage Core Course – Honors)** A study of the intersection between the Gaelic and Anglo-Irish linguistic, cultural and literary traditions of Ireland. Besides exploring the past and present state of Gaelic language and culture, the class will focus on the impact of the older Gaelic heritage on English-language classics by writers such as Swift, Joyce, Yeats, Beckett and Heaney.

280 Creative Writing – Poetry, Prose
4.00 credits. The writing of original poetry or prose. Graded Pass/No Pass. Register by Instructor.

281 CE Writing and Analyzing the Short Story WRI
4.00 credits. **(Creative Expression Core Course)** Students analyze classic short stories using the language and concepts of literary criticism through discussion, oral presentations, and a major research paper. Emulating classic literary models, they also write original short stories, revising according to detailed critiques by their peers and the instructor. **Prerequisite: Power of Language – English requirement.* **A Writing and Research Intensive Course.*

282 Technical Writing
4.00 credits. A course emphasizing clarity and precision in writing and including instruction in oral and graphic presentation of technical and scientific information. **Professional Writing majors must have completed EN 185.* Fall semester. Register by Instructor.

283 Legal Writing
4.00 credits. A survey of the types of writing common in government, politics and law. Students practice basic legal analysis, statistical analysis, persuasion and more advanced forms of legal writing, such as the appellate brief. **Professional Writing majors must have completed EN 185.* Register by Instructor.

284 Writing in the Social Sciences
4.00 credits. Students analyze articles, books, reviews and research in the fields of psychology, political science, anthropology, sociology, history and economics. Assignments include a variety of research forms, including the observation, experiment, survey and interview. **Professional Writing majors must have completed EN 185.* Alternate years. Register by Instructor.

285 Business Writing
4.00 credits. This course is designed to strengthen each student's competence and confidence in business communication. Students will focus on the most common

writing tasks in business and public relations, including instruction and practice in writing and laying-out display ads, news releases, brochures, newsletters, in-house proposals and business plans. **Professional Writing majors must have completed EN 185.* Register by Instructor.

286 Creative Non-Fiction
4.00 credits. A readings and workshop course in literary nonfiction, this course acquaints students with the research and writing techniques used by writers of nonfiction and with the history of the genre. Students select their own writing projects from a variety of genres. **Professional Writing majors must have completed EN 185.* Alternate years. Register by Instructor.

287 Writing Children's Literature
4.00 credits. An introductory survey of children's literature primarily from 19th and 20th century British and American authors. Students write fiction and nonfiction for a variety of current target markets in children's literature, such as picture books, early readers, chapter books, and middle-grade to young-adult level books. **Professional Writing majors must have completed EN 185.* Alternate years. Register by Instructor.

302 The English Language
4.00 credits. A study of historical, grammatical and linguistic analyses of the English language. This course includes traditional, transformational and transactional grammars; and structural, social and psycholinguistics, including biological and environmental influences on language acquisition. Alternate years.

306 Methods Seminar in Teaching Language and Composition
4.00 credits. The teaching of English grammar and usage with reference to teaching composition at the secondary school level and practical application of various methodologies through teaching internships in the classroom and/or the Learning Center. **Must be completed prior to the professional semester.*

311 Genre Studies
4.00 credits. A study of a particular genre such as autobiography or nonfiction narrative. Representative works will be discussed. **Since the course may vary in focus, it may be repeated for credit, providing the content is not duplicated.*

313 Studies in Drama
4.00 credits. A study of drama considering such issues as links between the visual and verbal representation of meaning, and the development of the concepts of comedy and tragedy. **Since the course may vary in focus from early drama to modern, it may be repeated for credit, provided the content is not duplicated.*

317 Studies in Narrative
4.00 credits. A study of narratives, with attention to the history and development of genres such as the novel. Both literary and theoretical works are discussed. **Since the course may vary in focus, it may be repeated for credit, provided the content is not duplicated.*

318 Studies in Poetry
4.00 credits. A study of at least three major poets from one or more periods of American or English literature. **Since the course may vary in focus from early forms to modern, it may be repeated for credit, provided the content is not duplicated.*

320 Themes, Traditions and Perspectives
4.00 credits. This course examines selected literary themes and traditions and brings a variety of critical perspectives to bear on works of poetry, drama and/or prose. **Since the course may vary in thematic focus, it may be repeated for credit provided the content is not duplicated.*

370-378 Special Topics in English
4.00 credits. Courses involving specific subjects chosen in response to student and faculty interest.

385 Writing and Editing for Publication
4.00 credits. Advanced study of writing nonfiction articles, copy editing and strategies for getting manuscripts published. **Professional Writing majors must have completed EN 185 and either 282 or 285.* Alternate years. Register by Instructor.

403 Shakespearean Drama
4.00 credits. A study of representative works by Shakespeare. Does not fulfill the 400-level authors seminar requirement. Alternate years.

420 Pre-1800 British Authors
4.00 credits. A seminar focused on the writings of one or more British authors active before 1800, such as Chaucer, the Pearl Poet, Donne and Herrick, or Pope and Swift. **Since the authors studied may vary from term to term, the course may be repeated for credit, provided the content is not duplicated.*

430 Post-1800 British Authors
4.00 credits. A seminar focused on the writings of one or more British authors active after 1800, such as Blake or Coleridge, or Austen and Eliot. **Since the authors studied may vary from term to term, the course may be repeated for credit, provided the content is not duplicated.*

440 American Authors
4.00 credits. A seminar focused on the writings of one or more American authors, such as Hemingway, Morrison and Faulkner, or Hall, Bly and Kinnell. **Since the*

authors studied may vary from term to term, the course may be repeated for credit, provided the content is not duplicated.

450 World Authors
4.00 credits. A seminar focused on the writings of one or more Continental or non-Western authors, such as Dante, Tolstoy or Kafka. **Since the authors studied may vary from term to term, the course may be repeated for credit, provided the content is not duplicated.*

472-474 Internship English
Variable (2.00 to 4.00) credits. Internships provide students with practical workplace experience at a newspaper office, magazine publisher, public relations firm, or other venue for professional writing. Register by Instructor.

480-489 Independent Study in English
Variable credit. Individual students are provided the opportunity to pursue work in an area of major interest under the guidance of a member of the Department of English. **Prerequisites: approval of Department Chair and the College Independent Study Committee.* Register by Instructor.

493 Seminar in Rhetorical Theory
4.00 credits. A seminar for majors in the Professional Writing concentration on the history of rhetoric and its application to the composing process. **Prerequisites: Professional Writing concentration, EN 185, and one 200-level professional writing course.*

494 Seminar in Literary Theory
4.00 credits. A seminar for majors in the Literature concentration on literary theory and its application to texts. **Prerequisites: Literature concentration, and junior or senior status, or permission of the instructor.* Alternate years.

498 Directed Senior Research I
2.00 credits. English majors of superior ability are allowed to explore a topic of their choosing and to produce a major work of 40 to 60 pages. **Prerequisites: senior standing, a grade point average of 3.50 or higher in the major and overall, and permission of the Department.* Two credits are awarded each semester of the senior year. See the Department Chair or Head of the English Directed Senior Research Program for more information. Register by Instructor.

499 Directed Senior Research Project II
2.00 credits. English majors of superior ability are allowed to explore a topic of their choosing and to produce a major work of 40 to 60 pages. **Prerequisites: senior standing, a grade point average of 3.50 or higher in the major and overall, and permission of the Department.* Two credits are awarded each semester of the senior year. See the Department Chair or Head of the English Directed Senior Research Program for more information. Register by Instructor.

Department of Fine and Performing Arts (B.A., B.M.)

Bomberger (Chair), Behrens, Daughtrey, Devroop, Friedly, M. Fritz, Hackman, Haines, Levin, P. Ricci, Ronning, Schellenberg, Spence, Swanson

The Department of Fine and Performing Arts plays a major role in fulfilling the College's mission "to nurture sound intellectual judgment, keen moral sensitivity, and an appreciation for beauty in the world." In the process of acquiring knowledge of the arts, students develop aesthetic judgment and an appreciation for the value of the arts to humanity. The Department encourages students to reach their highest potentials and to use their knowledge and their talents to benefit others.

The Department of Fine and Performing Arts includes programs in Fine Arts, Music and Theatre. In addition to courses in each of these areas, it offers courses in Dance and has a **Preparatory Music Division** that offers instruction to pre-college students, adults and college students who desire to take instruction without credit. Instruction is available from the Department's faculty and other qualified teachers. Interested persons should contact Prof. Grant Moore, Director of the Preparatory Division.

The Department offers three majors that lead to degrees in music: the **Bachelor of Music in Music Education**, **Bachelor of Music in Music Therapy**, and **Bachelor of Arts in Music**. Also offered are: **Bachelor of Arts in Fine Arts** and **Bachelor of Arts in Theatre**. Minors are offered in **History of Art**, **Studio Art**, **Music** and **Theatre**.

Honors in the Discipline

The Department of Fine and Performing Arts participates in the College Honors in the Discipline Program. For guidelines, students should consult the Department Chair.

Fine Arts Program

The academic and the practical courses in the Fine Arts Program aim to refine students' creative potential, expand their judgment of the visual arts, and discern the contrasts and relationships among the arts of Western culture and those of other traditions.

Bachelor of Arts in Fine Arts

The Fine and Performing Arts Department offers a **Fine Arts** major with emphasis in **Studio Art**, **Art History** and **Art Education** certification. Students interested in applied fine arts should follow the **Studio Art track**; students interested in working in museums and galleries or pursing graduate study in art history should follow the **Art History track**; and students interested in pursuing an education certification should follow the **Art Education track**.

For the **Fine Arts: Studio track**, students must take the following nine foundational courses: Art 105, 106, 120, 130 or 251, 155, 157, 205, 210, and 498. In addition, students must take one 200-300 level studio elective course (Art 204, 206, 305, 320, or 352); one 400-level studio elective course (Art 401, 402, 403, 404, 405, or 470) and one 200-300 level art history elective course (Art 230, 250, 260, 270, or 360).

For the **Fine Arts: Art History track**, students must take the following eight foundational courses: Art 105, 106, 120, 130 or 251, 155, 157, 205, and 498. In addition, students must take three 200-400 level art history elective courses (Art 230, 250, 260, 270, 360, or 470), and one 200-300 level studio elective course (Art 206, 210, 251 if not already taken as a foundational course, 305, 320, or 352).

For the **Fine Arts: Art Education track**, students must complete 10 foundational art courses: Art 105, 106, 120, 205, 210, 155, 157, 310, 315, Art 130 or Art 251; 8 credits of 200-300 level Art History electives (Art 230, 250, 260, 270 or 360) and Education 105, 150, 241, 282, 470 and 490; two English courses (one literature and one writing) and two math courses. In addition, students must complete one of the following concentrations:

Drawing: Art 105, 210 and 402
Sculpture: Art 120, 320 and 405
Painting: Art 205, 305 or 204, and 403
Ceramics: Art 106, 206 and 401
Graphics/Media Arts (Select any three courses): Art 130,145, 251, 352, 404, Com 145, or Com 125.

Some Courses within the concentration areas can be double-counted within the foundational Art Education major requirements. Upon completion of this degree program, students are eligible to obtain the Pennsylvania Teaching Certification in Art K-12.

Fine Arts Minors

The **Art History minor** requires Art 155, 157, and three 200-400 level art history elective courses (Art 230, 250, 260, 270, 360 or 470).

The **Studio Art minor** requires Art 105; 106 or 120; 155 or 157; one 100-200 level studio art elective course (Art 130, 204, 205, 206, 210, or 251), and one 200-400 level art history elective course (Art 230, 250, 260, 270, 360 or 470).

Fine Arts Courses

105 CE Drawing I
4.00 credits. **(Creative Expression Core Course)** Studio practice in basic drawing media for sketching and rendering both live and inanimate subjects.

106 CE Ceramics I
4.00 credits. **(Creative Expression Core Course)** Introduction to ceramic design and history, with emphasis on fundamental construction, decorating, glazing and firing techniques, and operation of the machinery of the medium.

120 CE Sculpture I
4.00 credits. **(Creative Expression Core Course)** An exploration in the three dimensional medium of traditional and contemporary ideas, basic problems in design, and instruction in the use of the sculptor's materials and techniques.

130 Computer Art
4.00 credits. An introductory studio/lecture course designed to increase visual literacy and vocabulary, to develop design skills and present the creative possibilities of the computer as an art making and editing tool. Historical, conceptual, technical and contemporary issues of digital imaging are explored. **Prerequisite: ART 105 (except Communications majors/minors), or permission of the instructor.* Spring semester.

145 CE Black-and-White Photography (COM 145)
4.00 credits. **(Creative Expression Core Course)** Photography will be dealt with as a photojournalistic form, promotional form, and an art form. No prior knowledge or experience in the arts or photography is expected. Demonstrations and supervised lab periods will be used to instruct students in basic camera and darkroom techniques of black-and-white photography. Individual and group critiques/discussions of student photography will be held. Discussion of photographic history, criticism and aesthetics will be used to help the student understand class projects and to increase appreciation of photographic traditions and contemporary trends.

155 WCH Introduction to the History of Art I
4.00 credits. **(Western Cultural Heritage Core Course)** A survey of the architecture, painting and sculpture of Western civilization from pre-history through the 14th century, including the Paleolithic and Neolithic eras, the Ancient Near East, Egypt, Ancient Greece and Rome, and the Middle Ages. Fall semester.

157 WCH Introduction to the History of Art II
4.00 credits. **(Western Cultural Heritage Core Course)** A continuation of Art 155, this course traces the development of the fine arts in Europe from the 14th to the 20th centuries, including the Renaissance, Baroque, Rococo, Neoclassical, Romantic and Modernist movements. Spring semester.

204 Watercolor
4.00 credits. Studio painting with transparent medium on paper. An introductory course emphasizing basic techniques and exploration of the expressive qualities of the medium. **Prerequisite: ART 105*. Fall semester, even-numbered years.

205 Painting I
4.00 credits. Studio easel painting in opaque media, with stress on pictorial organization and application of color theories. **Prerequisite: ART 105*. Fall semester.

206 Ceramics II
4.00 credits. An intermediate-level course with emphasis on developing and refining studio techniques and integration of form and idea. **Prerequisite: ART 106*. Spring semester.

210 Drawing II
4.00 credits. An intermediate-level course that stresses further conceptual, pictorial, and technical development beyond Drawing I, with an emphasis on personal theme and content. **Prerequisite: ART 105, or permission of the instructor*. Spring semester.

230 American Art
4.00 credits. A survey of American painting, sculpture and architecture from the Colonial era through the 20th century. Issues discussed include the artists' roles in representing national identity, the wilderness, the frontier and the city, and the American contributions to photography, the moving picture, and the skyscraper. Fall semester, even-numbered years.

250 Neoclassicism and Romanticism
4.00 credits. An in-depth study of European art and culture from 1750 to 1850 that examines the role of Neoclassicism and Romanticism in promoting social and political ideals, the aesthetics of the Beautiful and the Sublime, and cultural primitivism. **Prerequisites: ART 157, or permission of the instructor*. Fall semester, odd-numbered years.

251 Printmaking I
4.00 credits. Practice in the methods of relief, intaglio and monotype, and instruction in the use of the printer's machinery. **Prerequisite: ART 105, or permission of the instructor.* Spring semester.

260 Modernism
4.00 credits. A history of the Modernist movement in painting, sculpture, architecture, design and film from 1870 to 1945. The course traces the revolutionary theories of Impressionism, Post-Impressionism, Expressionism, Cubism, Dada, Surrealism, Futurism and Suprematism. **Prerequisite: ART 157, or permission of the instructor.* Spring semester, even-numbered years.

270 NCH Non-Western Traditions: Art of Africa, Asia, & Americas WRI
4.00 credits. **(Non-Western Cultural Heritage Core Course)** A survey of the artistic traditions of Africa, Asia, the Pacific Islands, and the Pre-Columbian civilizations of North and South America examined within their historical context. Topics include cultural exchanges between Western and Non-Western civilizations and the impact of trade, war and colonization on indigenous artistic traditions. **A Writing and Research Intensive Course.* Spring semester, odd-numbered years.

305 Painting II
4.00 credits. An intermediate-level course with emphasis on developing and refining technique and concept. A continuation of the formal issues surrounding color and composition presented in Art 205. **Prerequisite: ART 204 or 205.* Spring semester.

310 Art Education Methodologies & Curriculum Development – Elementary
4.00 credits. This course prepares Art Certification candidates to develop a visual arts curriculum for kindergarten through sixth grade that meets Pennsylvania Standards for the Arts & Humanities. Child-centered, society-centered and discipline-based theories of art education will be discussed in the elementary school context. Students write age-appropriate lesson plans and test their effectiveness in a classroom under the supervision of a certified art teacher. They learn to manage a sage instructional environment conducive to learning for a diverse population of students, including those with special needs. Fall semester.

315 Art Education Methodologies & Curriculum Development – Secondary
4.00 credits. This course prepares Art Certification candidates to develop a visual arts curriculum for the seventh through the twelfth grades that meets Pennsylvania Standards for the Arts & Humanities. Students will develop age-appropriate lesson plans for middle and secondary school that include two- and three-dimensional works of art, aesthetics and multicultural traditions of art history. They learn appropriate instructional methodologies and assessment strategies for a diverse population of adolescents, including those with special needs. Methods of

managing a safe instructional environment conducive to creativity will be taught. Students will have the opportunity to participate in a classroom under the supervision of a certified art teacher. Spring semester.

320 Sculpture II
4.00 credits. A continuation of Art 120 with further exploration of possible three-dimensional mediums and development of the methods used for traditional, modern and contemporary sculpture. **Prerequisite: ART 120.* Fall semester. Register by Instructor.

352 Printmaking II
4.00 credits. A continuation of Art 251 with further exploration in the methods of relief, intaglio and monotype printmaking and further instruction in the use of the printer's machinery. **Prerequisite: ART 251.* Spring semester, as needed.

360 Italian Renaissance
4.00 credits. The Italian Renaissance seminar is an in-depth cultural history of the humanist movement in Italy from 1250 to 1550 and its impact on the fine arts, literature, politics, religion, education and science. The course includes reading and discussion of primary texts by Petrarch, Dante, Boccaccio, Alberti, Machiavelli, Da Vinci, Michelangelo and Vasari. Topics include the revival of Antiquity, the discovery of Nature, Statecraft, scientific innovation and new concepts of genius and creativity. **Prerequisite: ART 155, ART 157 or HI 115.*

370-378 Special Topics in Fine Arts
4.00 credits. This sequence of courses permits the Department to offer courses to any group of students who expresses interest in a particular area of study that is not a regular part of the curriculum.

401 Advanced Studies in Ceramics
4.00 credits. Advanced study with emphasis on conceptual, pictorial, thematic and technical development. This course is repeatable for up to three semesters. Spring semester. Register by Instructor.

402 Advanced Studies in Drawing
4.00 credits. Advanced study with emphasis on conceptual, pictorial, thematic and technical development. This course is repeatable for up to three semesters. Spring semester. Register by Instructor.

403 Advanced Studies in Painting
4.00 credits. Advanced study with emphasis on conceptual, pictorial, thematic and technical development. This course is repeatable for up to three semesters. Spring semester. Register by Instructor.

404 Advanced Studies in Printmaking
4.00 credits. Advanced study with emphasis on conceptual, pictorial, thematic and technical development. This course is repeatable for up to three semesters. Spring semester. Register by Instructor.

405 Advanced Studies in Sculpture
4.00 credits. Advanced study with emphasis on conceptual, pictorial, thematic and technical development. This course is repeatable for up to three semesters. Fall semester. Register by Instructor.

470 Fine Arts Internship
Variable (3.00 or 4.00) credits. An internship experience for students in one of the Fine Arts majors or minors, as recommended by the Department. Register by Instructor.

480-489 Independent Study in Fine Arts
3.00 credits. Individual students are provided the opportunity to pursue work in an area of major interest under the guidance of a member of the Department. **Prerequisites: approval of Department Chair and the Independent Study Committee*. Register by Instructor.

498 Senior Seminar and Portfolio
3.00 credits. A capstone course required by all majors that provides opportunities for advanced research and development in studio and gallery/museum related work. The course builds and enhances the resumé and introduces the practical functions, operations and workings for a career in art. Offered as needed.

Music Programs

The music unit provides opportunities for all students to study and experience music at all levels. Music majors are chosen through an audition/interview process in which their performance and listening skills as well as their aptitudes for their prospective majors are evaluated. All music majors develop the performance and listening skills necessary to become musicians, and are well-grounded in music history, theory and literature. Specific professional skills are developed by the majors in music education and music therapy, while liberal arts majors are introduced to a broad spectrum of knowledge about music. All students are prepared for potential graduate study in an area of their choice.

Elizabethtown College is an accredited institutional member of the National Association of Schools of Music.

The Department has adopted requirements for junior standing for Music majors. A copy of these requirements is available in the Department office.

The Department offers a **Bachelor of Music in Music Education**, **Bachelor of Music in Music Therapy** and a **Bachelor of Arts in Music**.

Bachelor of Music in Music Education

Music Education requires Music 100 (seven semesters), 101, 102, 103, 104, 110, 111 or 133, 117, 118 or 268, 119, 121, 122, 130, 203, 204, 205, 217, 218, 221, 230, 231, 234, 237, 240, 321, 322, 330, 331, 332, 333, 334, 343, 433, 434, 440, 471, 491, and 499; a minimum of eight additional credits of applied music study; two semesters of Music 363 and seven semesters of participation in other ensemble(s); a senior recital; proficiency examinations in piano, voice and guitar; Education 105, 150, 241, 282; two English courses (one literature and one writing) and two math courses. For Music Education majors, Music 121 and Music 122 together will satisfy the Western Cultural Heritage Area of Understanding for Core. Upon completion of this degree program, students are eligible to obtain the Pennsylvania Instructional I Teaching Certificate. The Music Education major is approved by the Pennsylvania Department of Education.

Bachelor of Music in Music Therapy

Music Therapy requires Music 100 (eight semesters), 101, 102, 103, 104, 110, 111 or 117, 118 or 268, 119 or 275, 121, 122, 150 (eight semesters), 151, 152, 203, 204, 205, 217, 218, 221, 236, 241, 253, 254, 255, 321, 332, 351, 355, 356, 357, 358, 454, 457, 458, 459, 479, and 499; a minimum of eight additional credits in applied music instruction; a senior recital; a minimum of five credits in ensemble; and proficiency exams in piano, voice, and guitar. Also required are Psychology 221 and 225. Specific courses to be included in the student's Core Program are Biology 101 or 111; Biology 201 (counts as Natural and Physical Science Core for Music Therapy students); Mathematics 251; and Psychology 105. For Music Therapy majors, Music 121 and Music 122 together will satisfy the Western Cultural Heritage Area of Understanding for Core.

An approximately six-month long internship in an approved clinical facility is required for the Music Therapy degree and is taken after the completion of the four-year Music Therapy program. Upon completion of this degree program, students are eligible to sit for the Music Therapy Certification Board Exam leading to Board Certification as a Music Therapist. The Music Therapy program is approved by the American Music Therapy Association.

Additional Requirements for Music Education and Music Therapy

A Music Therapy or Music Education major may not enroll in a course required for that major unless a grade of C- or better has been earned in all prerequisite courses. To graduate, a Music Therapy or Music Education major must maintain the following standards:

A Music Therapy major must earn a grade of C- or better in all music and music therapy courses. A Music Education major must earn a grade of C- or better in all music and music education courses as well as in Education 105 and 490.

A Music Therapy major must satisfy the standards and requirements in all field work education, including clinical practicums and the internship. A Music Education major must satisfy the standards and requirements of the educational practicum and student-teaching experiences.

Bachelor of Arts in Music

The requirements for the Music major are flexible and are determined by the needs and interests of each student. Under the guidance of a Departmental advisor, each student designs a program that includes 54 credits of music courses, but must include the following: Music 100 (eight semesters), 101, 102, 103, 104, 110, 111 or 117, 118 or 268, 121, 122, 203, 204, 217, 218, 221, 321, 499; eight credits in applied music; a senior recital; and three credits of ensemble. The student must complete Modern Language 112 (or a higher course, if so placed by testing).

Music Minor

The **Music minor** provides students with opportunities to acquire and develop skills in music theory, music performance, music history and literature. The Music minor requires Music 101 and 103, or 305; 110, 121; 441 or 205 or 242 or 243; four credits of instruction on one instrument or in voice, with registration in Music 100 (Repertoire Class) in each of the same semesters; and minimum of four credits of music ensemble participation. **A student electing to minor in Music must consult with the Department Chair, who assigns a music faculty member to assist the student's academic advisor as necessary.**

Music Courses

100 Repertoire Class
0.00 credit. This class provides performance opportunities for students in applied music. It meets for one hour each week and is required for all music majors and minors who are enrolled in applied music instruction.

101 Theory of Tonal Music I
3.00 credits. The two semesters of Theory of Tonal Music deal with the construction and analysis of common-practice music from around 1700 to 1900. The first semester begins with norms of four-part harmony and melodic/harmonic constructs. Diatonic harmonic and closely-related modulation norms are covered as well as binary and ternary forms. **Prerequisite: MU 110*. Spring semester.

102 Theory of Tonal Music II
3.00 credits. The two semesters of Theory of Tonal Music deal with the construction and analysis of common-practice music from around 1700 to 1900. The second semester emphasizes advanced chromaticism and modulation, and extended tertian harmony. Forms studied include theme and variation, sonata and rondo. An overview of fugal procedures is included. **Prerequisite: MU 101*. Fall semester.

103 Aural Skills I
1.00 credit. Music reading and ear training according to the Kodaly concept using syllables based on moveable "Do," kinesthetically reinforced by hand signs. Study and drill in rhythm will include the use of the basic beat patterns. Linear dictation including rhythmic elements. Aural skills related to theoretical analytical materials covered in Music 101. **Corequisite: MU 101*. Spring semester.

104 Aural Skills II
1.00 credit. A continuation of Music 103 including chromaticism, modulation, modes and more difficult rhythms and intervals, C clefs. **Prerequisite: MU 103, or permission of the instructor*. Fall semester.

105 WCH Introduction to Western Music Literature
4.00 credits. **(Western Cultural Heritage Core Course)** Introduction to the music of the Western world, major composers, and selected famous compositions, with emphasis on listening to music from the Baroque era to the present.

110 Basic Musicianship
3.00 credits. An introduction to basic theoretical concepts, terms and aural skills essential to becoming a professional musician. An overview of Western music history including styles, genre, selected composers and specific works are included. Fall semester. Majors and minors only.

111 Voice Class
2.00 credits. The fundamentals of breath control, tone production, and development of vocal technique. **Open to all students*. Fall semester.

115 CE Fundamentals at the Keyboard
4.00 credits. **(Creative Expression Core Course)** Basic skills in producing and reading music at the keyboard with attention to ear training, basic keyboard technique, and musicianship, as well as to sight reading. The Department's digital piano laboratory is utilized. Daily practice is required. Spring semester.

117 Piano Class I
1.00 credit. Basic piano skills. Required of all music majors whose first applied

instrument is not piano. **The Department reserves the right to offer this course as private lessons if fewer than five students are enrolled. *Prerequisite: music major.* Fall semester.

118 Piano Class II

1.00 credit. A continuation of Music 117, including more difficult harmonic progressions and technical skills. Required of all music majors whose first applied instrument is not piano. **The Department reserves the right to offer this course as private lessons if fewer than five students are enrolled. *Prerequisite: music major.* Spring semester.

119 Guitar Class I

1.00 credit. An introductory course emphasizing studies in basic chords and note reading. Course also surveys various guitar styles, the performers, music and types of guitars. **The Department reserves the right to offer this course as private lessons if fewer than five students are enrolled.* Fall semester.

120 Guitar Class II

1.00 credit. A continuation of Music 119 with emphasis on bar chords, accompaniment patterns, and note reading. Includes an introduction to classical guitar technique, history, performers and classical literature. **The Department reserves the right to offer this course as private lessons if fewer than five students are enrolled. *Prerequisite: MU 119, or permission of the instructor.*

121 History of Tonal Music I

2.00 credits. A broad study of the technical, stylistic and social/historical developments related to Western music and musicians beginning around the year 1700, toward the end of the Baroque Era, and continuing to the end of the 18th century. Examples of music and styles being discussed are ever present. As much as possible, this study is coordinated with the study of Tonal Theory in Music 101. **Prerequisite: MU 110 and corequisite: MU 101.* Spring semester.

122 History of Tonal Music II

2.00 credits. A broad study of the technical, stylistic and social/historical developments related to Western music and musicians during the 19th century. Examples of music and styles being discussed are ever present. As much as possible, this study is coordinated with the study of Tonal Theory in Music 102. **Prerequisite: MU 121 and corequisite: MU 102.* Fall semester.

130 Survey of Music Education

1.00 credit. This course is the future music educator's first exposure to the profession. Students study the history of music education in the United States and philosophical influences on the profession. Students begin to explore the role of teacher through peer-teaching episodes and observations of practicing music educators. Print and electronic resources available to music educators also are investigated. Fall semester.

133 Diction for Singers
1.00 credit. Students are enabled to sing standard repertoire in English, Italian, German, French, Latin and Spanish with correct pronunciation. Fall semester.

150 Professional Seminar
1.00 credit. A weekly seminar for Music Therapy majors. Guest speakers, faculty and students present topics of mutual interest, including career development, application of music skills, and professional service. **Required of Music Therapy majors each semester.*

151 Introduction to Music Therapy
2.00 credits. An introduction to the field of music therapy. Topics include theoretical, historical and sociological rationale supporting the field and an overview of basic clinical practice and research methods. Emphasis is on a broad knowledge of the field resulting in a generalized understanding of the current state of practice and research. Clinical observation and in-class simulations are included with emphasis given to two populations as the semester progresses. Hours: 2 lecture, 1 laboratory. **Prerequisite: Music major, or permission of the instructor.* Fall semester.

152 Music Therapy and Clinical Populations
2.00 credits. The use of music therapy within various clinical populations is emphasized. Content includes a survey of a variety of populations with whom music therapists work, focusing on the characteristics and needs of each group, general treatment approaches, and methods for incorporating music therapy. Students complete their first pre-practicum experience, observing one clinical experience throughout the semester. Hours: 2 lecture, 1 laboratory. **Prerequisites: MU 151, and Music Therapy majors only.* Spring semester.

203 Aural Skills III
1.00 credit. Continued emphasis on reading and dictation skills with concentration on modulation and chromaticism using some 20th-century material. C clefs. **Corequisite: MU 102.* Spring semester.

204 Aural Skills IV
1.00 credit. A continuation of Music 203 with concentration on reading atonal melodies and 20th-century material. **Prerequisite: MU 203.* Fall semester.

205 NCH World Musics
4.00 credits. **(Non-Western Cultural Heritage Core Course)** Contemporary music indigenous to eight non-Western geographic regions of the world are studied and compared in terms of tonal and rhythmic attributes, and as an approach to promoting sociocultural awareness.

217 Keyboard Harmony I
1.00 credit. Scale harmonizations, modal harmonizations, figured bass realization, and transposition of simple instrumental melodic lines. **Prerequisite: MU 118, or permission of the instructor.* Fall semester.

218 Keyboard Harmony II
1.00 credit. A continuation of Music 217 involving further scale harmonizations, modulations, transpositions and emphasizing a variety of accompaniment styles. **Prerequisite: MU 217.* Spring semester.

221 20th-Century Music
4.00 credits. A study of the compositional techniques, materials, history and styles of Western art music, including jazz in the 20th century. Specific important composers and performers, selected works of music, and social/historical developments related to Western music will be the central focus. **Prerequisite: MU 102.* Spring semester.

230 Music Teaching and Learning
3.00 credits. Students discover how children learn music and the role of music learning theory in facilitating that process. The future music educator is also introduced to the process of curriculum development and the assessment of music teaching and learning. Model curricula based on national and state standards are reviewed. Peer teaching and school observations will be an integral part of the course experience. Fall semester.

231 Brass I
1.00 credit. This course will provide an overview of pedagogy for all brass instruments. Methods of tone production, fingerings or positions, care and repair, and methods and materials for teaching all brass instruments will be explored. Emphasis this semester will be on trumpet/cornet and trombone. **The Department reserves the right to offer this course as private lessons if fewer than five students are enrolled.* Fall semester.

234 Percussion Class
1.00 credit. Methods of tone production, care and repair, and methods and materials for teaching snare drum, cymbals, timpani and other percussion instruments. **The Department reserves the right to offer this course as private lessons if fewer than five students are enrolled.* Spring semester.

236 Percussion for Music Therapy
1.00 credit. Students learn to play, teach and care for snare drum, trap set, barrel type drums, frame drums, and auxiliary percussion instruments. Individual and small ensemble performances are an integral part of this course and discussions

about incorporating the skills and concepts into music therapy sessions. Spring semester. Register by Instructor.

237 String Class I

1.00 credit. Method of tone production, fingerings, care and repair, and methods and materials for teaching violin and cello in individual and class settings. **The Department reserves the right to offer this course as private lessons if fewer than five students are enrolled.* Fall semester.

239 Vocal Pedagogy

1.00 credit. An introduction to the fundamentals of teaching singing. Students examine the physiology of the voice, vocal sound production, care of the voice, teaching techniques and other related topics. Spring semester.

240 Conducting Laboratory

0.00 credit. Students become familiar with standard instrumental and choral repertoire and observe advanced conducting techniques by serving as a laboratory ensemble for Music 322 (Conducting II). Spring semester.

241 Music Therapy Methods and Techniques I

4.00 credits. The development of music and non-music skills and concepts related to conducting entry-level music therapy sessions. Emphasis is on the development and application of assessment and observation skills, treatment planning and implementation, leadership, documentation and music performance skills in therapeutic settings. Includes lecture and clinical experiences. **Prerequisite: MU 152.* Fall semester.

242 Mozart and 18th-Century Classicism

3.00 credits. Study of a symphony, a sonata, a string quartet, several concerti, lieder, an opera, masses and other sacred choral works by Mozart provides understanding of how the composer exemplified 18th-century classicism in his music.

243 Beethoven, Classicism, and Romanticism

3.00 credits. A study of the life and works of Ludwig van Beethoven. Beethoven stands as the musical Titan who bridged classicism and romanticism, the aesthetic parallels to reason and emotion. Students will develop an understanding of the intellectual and emotional choices made by Beethoven in his creative process and the historical and cultural environment in which those choices were made, and they will thereby better understand the basic human conflict between reason and emotion.

253 Music Therapy Methods and Techniques II

3.00 credits. A continuation of Music 241 involving the further development of

non-music and music skills and concepts related to conducting entry-level music therapy sessions. Includes the study of behavioral techniques, beginning counseling interaction skills, and other music and non-music methods and techniques employed within a music therapist's clinical work. Hours: 2 lecture, 1 laboratory. **Prerequisite: MU 241.* Spring semester.

254 Practical Experiences I: Music Therapy
1.00 credit. Supervised field experiences (observation and participation) in an approved clinical facility. A minimum of 13 planned sessions involving client contact and weekly processing with a supervisor are required for each clinical experience. **Prerequisites: MU 241 and a pass on the pre-clinical proficiency assignment and Music Therapy majors only.*

255 Arranging and Composing for Clinic
2.00 credits. Arranging and composing music for a range of music therapy situations is covered with emphasis placed on use of nonsymphonic instruments and voice in various therapeutic contexts. **Prerequisite: MU 102.* Spring semester.

268 CE Voice
1.00 credit. **(Creative Expression Core Course)** Applied Music Lesson. Fulfills the Creative Expression requirement of the Core if taken for four semesters (or total of four credits when combined with other eligible applied music lessons or ensembles).

269 CE Piano
1.00 credit. **(Creative Expression Core Course)** Applied Music Lesson. Fulfills the Creative Expression requirement of the Core if taken for four semesters (or total of four credits when combined with other eligible applied music lessons or ensembles). *Music majors whose principal instrument is NOT piano or organ must enroll in MU 117 before MU 269.

270 CE Organ
1.00 credit. **(Creative Expression Core Course)** Applied Music Lesson. Fulfills the Creative Expression requirement of the Core if taken for four semesters (or total of four credits when combined with other eligible applied music lessons or ensembles).

271 CE Violin
1.00 credit. **(Creative Expression Core Course)** Applied Music Lesson. Fulfills the Creative Expression requirement of the Core if taken for four semesters (or total of four credits when combined with other eligible applied music lessons or ensembles).

272 CE Viola
1.00 credit. **(Creative Expression Core Course)** Applied Music Lesson. Fulfills the Creative Expression requirement of the Core if taken for four semesters (or total of four credits when combined with other eligible applied music lessons or ensembles).

273 CE Cello
1.00 credit. **(Creative Expression Core Course)** Applied Music Lesson. Fulfills the Creative Expression requirement of the Core if taken for four semesters (or total of four credits when combined with other eligible applied music lessons or ensembles).

274 CE String Bass
1.00 credit. **(Creative Expression Core Course)** Applied Music Lesson. Fulfills the Creative Expression requirement of the Core if taken for four semesters (or total of four credits when combined with other eligible applied music lessons or ensembles).

275 CE Guitar
1.00 credit. **(Creative Expression Core Course)** Applied Music Lesson. Fulfills the Creative Expression requirement of the Core if taken for four semesters (or total of four credits when combined with other eligible applied music lessons or ensembles).

276 CE Flute
1.00 credit. **(Creative Expression Core Course)** Applied Music Lesson. Fulfills the Creative Expression requirement of the Core if taken for four semesters (or total of four credits when combined with other eligible applied music lessons or ensembles).

277 CE Clarinet
1.00 credit. **(Creative Expression Core Course)** Applied Music Lesson. Fulfills the Creative Expression requirement of the Core if taken for four semesters (or total of four credits when combined with other eligible applied music lessons or ensembles).

278 CE Oboe
1.00 credit. **(Creative Expression Core Course)** Applied Music Lesson. Fulfills the Creative Expression requirement of the Core if taken for four semesters (or total of four credits when combined with other eligible applied music lessons or ensembles).

279 CE Bassoon
1.00 credit. **(Creative Expression Core Course)** Applied Music Lesson. Fulfills the Creative Expression requirement of the Core if taken for four semesters (or total of four credits when combined with other eligible applied music lessons or ensembles).

280 CE Saxophone
1.00 credit. **(Creative Expression Core Course)** Applied Music Lesson. Fulfills the Creative Expression requirement of the Core if taken for four semesters (or total of four credits when combined with other eligible applied music lessons or ensembles).

281 CE Trumpet
1.00 credit. **(Creative Expression Core Course)** Applied Music Lesson. Fulfills the Creative Expression requirement of the Core if taken for four semesters (or total of four credits when combined with other eligible applied music lessons or ensembles).

282 CE French Horn
1.00 credit. **(Creative Expression Core Course)** Applied Music Lesson. Fulfills the Creative Expression requirement of the Core if taken for four semesters (or total of four credits when combined with other eligible applied music lessons or ensembles).

283 CE Trombone
1.00 credit. **(Creative Expression Core Course)** Applied Music Lesson. Fulfills the Creative Expression requirement of the Core if taken for four semesters (or total of four credits when combined with other eligible applied music lessons or ensembles).

284 CE Baritone Horn
1.00 credit. **(Creative Expression Core Course)** Applied Music Lesson. Fulfills the Creative Expression requirement of the Core if taken for four semesters (or total of four credits when combined with other eligible applied music lessons or ensembles).

285 CE Tuba
1.00 credit. **(Creative Expression Core Course)** Applied Music Lesson. Fulfills the Creative Expression requirement of the Core if taken for four semesters (or total of four credits when combined with other eligible applied music lessons or ensembles).

286 CE Percussion
1.00 credit. **(Creative Expression Core Course)** Applied Music Lesson. Fulfills the Creative Expression requirement of the Core if taken for four semesters (or total of four credits when combined with other eligible applied music lessons or ensembles).

290 Composition
1.00 credit. Development of skills in composing. Emphasis on creation of original works for a variety of media with performance as final product. Can be taken repeatedly for credit. **Prerequisite: MU 101.* For enrollment beyond two terms, Music 419 is required. Register by Instructor.

305 Teaching Music in the Elementary Classroom
4.00 credits. Provides students opportunities to develop skills in singing, song leading, listening, creating and performing. Emphasizes applying knowledge and skills to provide musical experiences for young children and work with music specialists. Includes observation of music instruction and performance.

321 Conducting I
2.00 credits. Instruction in the fundamentals of conducting. Topics include conducting techniques, instrumental and choral methods and problems, score reading, and interpretation. **Prerequisites: MU 221 and 203, or permission of the instructor.* Fall semester.

322 Conducting II
2.00 credits. A continuation of Music 321. **Prerequisite: MU 321.* Spring semester.

330 General Music Methods and Materials
2.00 credits. Preparation for students to teach elementary, middle and high school general music classes. Students are expected to plan and deliver general music lessons, interpret and apply contemporary music education pedagogies, and develop a reflective process to evaluate the effectiveness of their teaching and plan for improvements. Fall semester. **Corequisite: MU 331.*

331 General Music Field Experience
1.00 credit. Practical application of the skills learned in Music 330. Observations and field placement in a general music setting is required. Fall semester. **Corequisite: MU 330.*

332 Music Technology
1.00 credit. Students develop and practice skills in music technology. Students review current trends in music Computer Aided Instruction, develop skills in the use of audio- and video-recording equipment and gain expertise in the use of

various music production-related software and computer databases. Spring semester.

333 Choral Music Methods and Materials

2.00 credits. Students learn to select, analyze and prepare appropriate choral literature. Future choral directors are expected to demonstrate proper vocal technique, appropriate strategies for guiding singers in a choral rehearsal and knowledge of administrative activities specific to choral directors. Spring semester. **Corequisite: MU 334.*

334 Choral Music Field Experience Laboratory

1.00 credit. Practical application of the skills learned in Music 333. Observations and field placement in a secondary choral music setting will be required. Spring semester. **Corequisite: MU 333.*

343 Woodwind Class

1.00 credit. Methods of tone production, fingerings, maintenance, care and repair, and methods and materials for teaching flute, oboe, clarinet, bassoon and saxophone. **The Department reserves the right to offer this course as private lessons if fewer than five students are enrolled.* Fall semester.

351 Clinical Improvisation

2.00 credits. Skills in musical improvisation within the therapeutic setting are developed. The major focus of the course is vocal and piano improvisation with some emphasis on guitar and percussion improvisation. **Prerequisites: MU 218 and Music Therapy majors only.*

355 Practical Experiences II: Music Therapy

1.00 credit. Supervised field experiences (observation and participation) in an approved clinical facility. A minimum of 13 planned sessions involving client contact and weekly processing with a supervisor are required for each clinical experience. **Prerequisites: MU 253 and 254.*

356 Practical Experiences III: Music Therapy

1.00 credit. Supervised field experiences (observation and participation) in an approved clinical facility. A minimum of 13 planned sessions involving client contact and weekly processing with a supervisor are required for each clinical experience. **Prerequisite: MU 355.*

357 Music Therapy Methods and Techniques III

3.00 credits. A study of various philosophies and practices of music therapy as related to the implementation of music therapy within specific clinical populations and preparation for clinical internship. Emphases are on the integration of the

knowledge and skills associated with the practice of music therapy, verbal interaction skills, and interviewing for internships. **Prerequisites: MU 253 and 254.* Fall semester.

358 Psychology of Music and Research Methods I
3.00 credits. Beginning with a brief introduction to the research literature that the students read and an overview of the research process, the course then examines the literature on various topics related to acoustics and the psychology of music while discussing how the information applies to the practice of music therapy. Students review the literature on topics related to their chosen future research study that will be conducted the following semester. **Prerequisites: MU 253 and 254, MA 251, BIO 101 and 201.* Spring semester.

360A Chamber Music
0.50 credit. General chamber music course from which groups such as Brass Chamber Ensemble (B), Woodwind Ensemble (C), Flute Choir (E), Percussion Ensemble (F), Balinese Ensemble (G), Piano Ensemble (P), String Ensemble (S), and Wind Ensemble (W) will be formed as need arises. Graded Pass/No Pass.

361 CE Concert Choir
1.00 credit. **(Creative Expression Core Course)** Acceptance based upon auditions by appointment. Several performances on campus each year, and this group performs in churches and schools on its annual tour. Fulfills the Creative Expression requirement of the Core if taken for four semesters (or total of four credits when combined with other eligible applied music lessons or ensembles).

362 Choral Union
0.50 credit. Vocal ensemble open to any member of the student body (without prior audition). Its sections (SATB or SSA) are determined by the enrollment per part. Graded Pass/No Pass.

363 CE Community Chorus
1.00 credit. **(Creative Expression Core Course)** Vocal ensemble open to any member of the student body and local community without audition. Literature performed will include works from the standard choral repertoire, contemporary selections, and music of varying cultures and periods. Sections A and B are SATB Chorus; sections C and D are Women's Chorus. Fulfills the Creative Expression requirement of the Core if taken for four semesters (or total of four credits when combined with other eligible applied music lessons or ensembles).

365 CE Orchestra
1.00 credit. **(Creative Expression Core Course)** Open to all qualified students; acceptance subject to approval by Director. Presentation of several concerts during the year. String, chamber and full orchestra music is performed. Fulfills the

Creative Expression requirement of the Core if taken for four semesters (or total of four credits when combined with other eligible applied music lessons or ensembles). **Prerequisite for winds and percussion: permission of the instructor.*

368 Jazz Lab
0.50 credit. Small groups of students are offered instruction in the basic skills of improvisation, stylization and performance. The lab complements the jazz component of the Concert Band. Graded Pass/No Pass.

369 CE Symphonic Band
1.00 credit. **(Creative Expression Core Course)** Open to all qualified students; acceptance subject to approval by Director. Performances include the annual winter and spring concerts and a number of off-campus appearances. Fulfills the Creative Expression requirement of the Core if taken for four semesters (or total of four credits when combined with other eligible applied music lessons or ensembles).

370-378 Special Topics in Music
Variable credit. This sequence of courses permits the Department to offer courses that are not part of the regular curriculum.

419 Counterpoint
2.00 credits. A study of contrapuntal techniques of the 16th through 20th centuries through representative composers and original compositions. **Prerequisites or corequisites: MU 221 and 204.* Spring semester.

431 Piano Methods and Materials I
2.00 credits. Modern methods in teaching piano to children, youth and adults. Course includes a survey of teaching materials for various stages of progress, teaching demonstrations, and experience. Credit for Music 431 is given only upon completion of Music 432. **Prerequisites: two semesters of MU 269.*

432 Piano Methods and Materials II
2.00 credits. A continuation of Music 431. **Prerequisite: MU 431.*

433 Instrumental Music Methods and Materials
2.00 credits. The development of instrumental teaching skills for individual, small group and ensemble instruction will be the focus of this course. Philosophical considerations related to the role of instrumental music education and applications of Music Learning Theory provides the framework for this course. Selection of appropriate method book materials, ensemble literature and materials, rehearsal planning and techniques, and the development of a curricular approach to performance ensembles will be emphasized. Fall semester. **Corequisite: MU 434.*

434 Instrumental Music Field Experience
1.00 credit. This course will provide practical application of the skills learned in Music 433. Observations and field placement in a general music setting will be required. Fall semester. **Corequisite: MU 433.*

440 Arranging
2.00 credits. Arranging music for large and small ensembles; class performance of student works is combined with a study of the characteristics of each standard instrument and instrumental group. **Prerequisites: MU 204 and 221.*

441 History of Early Music
3.00 credits. A broad chronological study of the technical, stylistic and social/historical developments related to Western music and musicians, beginning with the music of the ancient Greek civilizations and especially emphasizing the development of polyphony until about the year 1700. Recorded and printed examples of the music and styles being discussed are ever present. **Prerequisite: MU 110, or permission of the instructor.* Spring semester.

454 Psychology of Music and Research Methods II
3.00 credits. A continuation of Music 358. Students will develop a more specific understanding of the concepts involved in conducting, reading and evaluating research in music therapy. Students will apply the concepts to the studies they designed the previous semester while conducting these studies. A few topics related to acoustics and the psychology of music also are included. **Prerequisite: MU 358.* Fall semester.

457 Practical Experiences IV: Music Therapy
1.00 credit. Supervised field experiences (observation and participation) in an approved clinical facility. A minimum of 13 planned sessions involving client contact and weekly processing with a supervisor are required for each clinical experience. **Prerequisites: MU 356 and 357.*

458 Practical Experiences V: Music Therapy
1.00 credit. Supervised field experiences (observation and participation) in an approved clinical facility. A minimum of 13 planned sessions involving client contact and weekly processing with a supervisor are required for each clinical experience. **Prerequisite: MU 457.*

459 Music Therapy Methods and Techniques IV
3.00 credits. A study of various philosophies, theories and practices as related to the implementation of treatment within music therapy. Emphasis is on the integration of the theories and concepts/skills associated with various music and

non-music methods and techniques to the practice of music therapy, as well as professional employment issues. **Prerequisite: MU 357*.

471 Professional Internship in Music Education
12.00 credits. Teaching experience and observation in elementary and secondary music classes. Instrumental and vocal emphases vary with student strengths and needs. Graded Pass/No Pass. Register by Instructor.

478 Non-Roster Professional Internship in Music Therapy
0.00 credit. A supervised practicum experience of varying length completed at a College-approved facility. The student is supervised by a board-certified faculty member from the Music Therapy program and an on-site board-certified music therapist. A minimum of 1,200 hours of clinical training is required at the completion of the internship. **Prerequisite: Completion of all other Music Therapy degree requirements.* Offered as needed.

479 Professional Internship in Music Therapy
0.00 credit. An approximately six-month-long, supervised practical experience with a board-certified registered music therapist in an AMTA-approved facility. Total number of clinical training hours must equal 1,200. Taken only after completion of all other Music Therapy degree requirements. Graded Pass/No Pass. Register by Instructor.

480-489 Independent Study in Music
Variable credit. Individual students are offered opportunities for musical composition, arranging, performance or research under faculty supervision. **Prerequisites: approval of Department Chair and Independent Study Committee.* Register by Instructor.

491 Student Teaching Seminar
0.00 credit. A forum for students to discuss and analyze issues pertinent to their current student-teaching experience and those relevant to their future profession. Interview techniques, Pennsylvania State Department of Education requirements and other topics proposed by the class will comprise the course content. Register by Instructor.

499 Seminar in Musicology
2.00 credits. A capstone course for all Music majors offering experience in the techniques of research about music, including bibliography, analysis of materials, and communication of conclusions. A substantial research project is required. **Prerequisites: junior standing in music; completion of all music courses in basic musicianship: MU 122, 204, 218 and 221.* Fall semester.

Special Notes regarding Applied Music Lessons and Ensembles

Students who register for applied music for credit must meet minimum standards established by the Department and should contact the Department office for a list of standards for each applied area. Students who have not attained the level necessary for credit may study through the Preparatory Division. Students in applied music advance as rapidly as their abilities permit. They must study technical exercises and literature from various musical periods and styles.

Students may register with or without credit for the established music ensembles and for other ensembles organized under faculty supervision; ensemble registration for credit may be repeated. All students must meet the standards for attendance at rehearsals and public performances established by the faculty Directors.

Applied music lessons and certain music ensembles may be counted for the Creative Expression requirement of the Core Program if taken as letter-graded for four semesters. An additional fee is charged for applied music lessons. Fees are printed on the master course schedule.

Theatre Program

The Theatre curriculum is based on a liberal arts foundation, requiring a series of Theatre Core courses followed by a concentration in either **Performance Studies** or **Theatre Technology**. Students have multiple opportunities to enhance classroom training with practical experiences.

Bachelor of Arts in Theatre

The **Theatre major** requires 43-44 credits: Theatre 105, 155, 165, 255, 310, 320, 340, 405; one course from Theatre 240, English 104 (Drama only), 313 or 403. In addition, the **Performance concentration** requires Theatre 265, 365, Dance 101 and two semesters of Theatre 360; the **Theatre Technology concentration** requires six hours of Theatre 355 (initially taken for four credits and repeated for two); Art 105 and two semesters of Theatre 350.

Theatre Minor

The **Theatre minor** requires 23-24 credits: Theatre 105, 155, 165; Dance 101; one course from English 104 (Drama only), 403, or Theatre 240 or 340. In addition, the **Minor Performance track** requires Theatre 265 or 320 and two semesters of Theatre 360; the **Minor Technical track** requires Theatre 255 or 355 and two semesters of Theatre 350.

Theatre Courses

105 HUM Introduction to Theatre
4.00 credits. **(Humanities Core Course)** An introduction to the various interrelated arts and disciplines that make up theatre performance and production, such as acting, playwriting, directing and design. Emphasis is on history, literature and theory as realized in performance. Text provides a common language for discussion, and further support is drawn from videos, script analysis and play attendance.

155 CE Stagecraft
4.00 credits. **(Creative Expression Core Course)** An introductory course in the aspects of theatrical production with emphasis placed on scenic and lighting technology. Students develop an understanding of basic and intermediate-level production techniques while becoming familiar with the tools, hardware and theory related to contemporary theatrical practice. Multiple hands-on projects focusing on theatrical design, carpentry, rigging, painting, electrical wiring and properties artistry afford opportunities to link creative, cognitive reasoning with acquired skills. A weekly two-hour lab is required.

165 CE Basic Acting
4.00 credits. **(Creative Expression Core Course)** Theory and practice of the art and craft of the stage actor are addressed. Skills are developed in voice, body movement, script analysis, style and theory. Students participate in projects requiring the memorization, creation and presentation of scenes.

240 Playwriting
3.00 credits. The study of the tools and techniques of creative writing for the theatre. Students will develop scripts that may receive staged readings or short play festival productions. Alternate fall semesters.

255 CE Fundamentals of Theatrical Design
4.00 credits. **(Creative Expression Core Course)** This course offers an introduction to the four major areas of theatrical design: scenery, lighting, costume and sound. Using theatrical texts as a springboard for the development of theoretical design work, students develop their own aesthetic sensibilities and the visual and verbal skills to express themselves in terms of basic theatrical design. While this course utilizes hands-on artistic techniques, a thinking, curious mind is the primary tool. A weekly two-hour lab is required.

265 Acting I
4.00 credits. A second-level course in the acting sequence, which emphasizes the study of character development and continued expansion of the student's acting repertoire through classroom presentations. **Prerequisite: TH 165*. Alternate spring semesters.

310 Theatre History
4.00 credits. A survey of world theatre from its roots in ritual and storytelling up to and including the present day. The course will focus on non-dramatic aspects of the theatre: acting, directing, design, architecture, audience, management, governmental control, and the historical and social contexts of the various periods in which theatre has thrived and which the theatre has reflected. **Prerequisite: TH 105*. Alternate spring semesters.

320 Directing for the Theatre
4.00 credits. A focus on the technique and practice of directing for the theatre. Students analyze dramatic literature with respect to historical context, structure and performance conceptualization. Directing methods are explored, as are the use of space, staging, rhythm, tempo and pace. Students put theory into practice by directing a short play at the end of the semester. **Prerequisites: TH 105 and 165*. Alternate fall semesters.

340 Modern and Contemporary Drama: From Realism to the Present
3.00 credits. A study in comparative drama and theory of the modern era, from the 19th century beginnings of realism, through expressionism and the theatre of the absurd, and to the eclectic work of the contemporary theatre. **Prerequisite: TH 105*. Alternate spring semesters.

350 Design and Production Practicum
1.00 credit. An opportunity for students to earn credit for significant design and production work. Students work on projects ranging from lighting, costume or scenic design to stage management, master electrician or public relations.

355 Theatrical Design Studio
4.00 credits. This primary design component addresses the elements of design and composition in the areas of scenery, lighting and costume. Projects in drafting, rendering and model construction afford students opportunity to test theory with practice. Each student completes a final project in one design area. This course is repeatable for two additional credits. **Prerequisite: TH 155 or 255, or permission of the instructor*. Spring semester.

360 Performance Practicum
1.00 credit. An opportunity for students to earn credit for significant performance work. Students work under the supervision of a faculty or student director for one of the program's productions.

365 Acting III
3.00 credits. This is a third-level course in acting techniques and styles. Students will study, interpret and perform scenes from seminal texts in theatre history, ranging from the Greeks to the Post Modernists. **Prerequisites: TH 165 and 265, or permission of instructor*. Alternate spring semesters.

370-378 Special Topics in Theatre
Variable credit. This sequence of courses permits the Department to offer courses that are not part of the regular curriculum.

405 Senior Project in Theatre
2.00 credits. The capstone course for the major, the project is intended to be completed in the student's area of concentration. These can include: a realized project in acting, design, direction, playwriting or management; or a project in historical research and writing. Projects must be proposed and accepted the semester before their senior year. **Prerequisite: all theatre core coursework and 50 percent of concentration coursework must be completed.* Offered as needed.

480-489 Independent Study in Theatre
Variable credit. Independent Study in Theatre. **Prerequisites: permission of Program Director and Independent Study Committee.* Register by Instructor.

Dance Courses

The Department of Fine and Performing Arts offers several dance courses as elective options or to fulfill part of the Creative Expression Core requirement. If used for Creative Expression, two courses must be completed for a total of four credits.

101 CE Introduction to Modern Dance
2.00 credits. **(Creative Expression Core Course)** An introduction to modern dance techniques and aesthetics requiring athletic, creative and cognitive participation. Course work includes physical conditioning techniques, interpretive/creative movement experiences, and modern dance technique basics. Reading, discussion, writing and viewing contemporary dance facilitate an overall appreciation of dance as an art form.

102 CE Introduction to Ballet
2.00 credits. **(Creative Expression Core Course)** A basic introduction to ballet technique, including bar, center floor and traveling combinations. Class includes development of anatomically correct alignment and dance technique, dance conditioning, spatial clarity, coordination, rhythm, use of weight, time and space. Class work will include readings, discussions, viewing of dance films, short writing assignments and performances of rehearsed dance sequences. Fall semester.

103 CE Introduction to Jazz Dance
2.00 credits. **(Creative Expression Core Course)** Jazz dance techniques emphasizing a range of styles, incorporating the Limon technique, classical show jazz and funk for the beginner. Course work includes full jazz warm-ups, classical jazz technique/terminology, floor work, conditioning and performance of dance combinations. Class also includes reading, discussions, viewing and writing about jazz dance. Spring semester.

120 CE Dance Improvisation and Composition
2.00 credits. **(Creative Expression Core Course)** This course will use improvisation as well as a variety of movement techniques to gain a better understanding of how the body functions both anatomically and kinesthetically, and to explore the capabilities of movement as an expressive art form.

202 CE Ballet II
2.00 credits. **(Creative Expression Core Course)** A continuation of Dance 102 including bar, center floor and traveling combinations. Development of increasingly complex anatomically correct alignment and dance technique, dance conditioning, spatial clarity, coordination, rhythm, use of weight, time and space. Class work includes readings, discussions, viewing dance films, short writing assignments and performances of rehearsed dance sequences. Spring semester.

203 CE Jazz Dance II
2.00 credits. **(Creative Expression Core Course)** Jazz dance techniques emphasizing a range of styles incorporating the Limon technique, classical, show, jazz and funk. The emphasis is on interpretation and performance of these styles on a more complex level. Coursework includes warm-ups, classical jazz technique/terminology, floor work, conditioning for jazz dance and performance of dance combinations center and across the floor. Class also includes reading, discussion, viewing and writing about jazz dance. Fall semester.

Department of History (B.A.)

G. Ricci (Chair), Brown, Kenley, Traverso, Winpenny

The study of history is a valuable component of a liberal arts education, as well as a vital link to our individual and collective heritage. Historians seek to identify those events and individuals in the past that inform and shape contemporary society. Through an understanding of how civilizations, cultures and institutions have formed and evolved over time, we are able to better comprehend ourselves and the general human condition. "History teaches us so nearly," an English historian once remarked. "It is so deep a question of life and death, that we are bound to find our way through it, and to owe our insight to ourselves."

The Department's program is designed to prepare students for further study in a variety of disciplines including history, law, library science, museum studies, government and theology. History is also an excellent preparation for careers in education, business and government services.

Majors Offered

The Department offers a major in **History** and participates in the **Social Studies Education Program** that prepares students to teach in secondary schools. Refer to the Interdisciplinary Programs chapter of this Catalog for the Social Studies requirements.

Combinations with other programs that allow the student to major in history and to pursue training for other careers are possible. For example, a student may major in history and also take a recommended program of courses in business. Consult with members of the Department for other options in combination with communications, political science or other program areas.

Bachelor of Arts in History

The **History major** requires 40 credits of course work: History 115; eight credits in U.S. history; eight credits in European history; eight credits in non-U.S., non-European history courses; and 12 additional credits of history course electives. At least four courses must be taken at the 300 level. History majors must successfully complete a Modern Language course at the 112 level (or higher if so placed).

Minors Offered

The Department offers a **History minor**. The History minor requires successful completion of 20 credits of course work composed of the following courses: History 115 and four history electives, of which at least two must be taken at the 300 level.

Honors in the Discipline

The Department of History participates in the College Honors in the Discipline Program. For guidelines, students should consult the Department Chair.

History Courses

111 NCH History of Pre-Modern Asia **WRI**
4.00 credits. **(Non-Western Cultural Heritage Core Course)** This course examines the history of Asia up to 1500. There will be a focus on cross-cultural contacts within Asia and with the larger world. By semester's end, students will have a factual understanding of Asia's role in the international community, including the cultural, political, intellectual and economic factors that have influenced this region's history. They will also learn to critically evaluate historical materials relevant to the study of Asia. **A Writing and Research Intensive course. *Prerequisite: Power of Language English Core course.*

112 NCH History of Modern Asia **WRI**
4.00 credits. **(Non-Western Cultural Heritage Core Course)** This course examines the history of Asia from approximately 1500 until the present day. It will focus on cross-cultural contacts within Asia and with the West. By semester's end, students will have a better appreciation of Asia in our international community, and will better understand the cultural, political, intellectual and economic factors that have influenced this region's history. **A Writing and Research Intensive course.* **Prerequisite: Power of Language English Core course.*

115 WCH Western Civilization
4.00 credits. **(Western Cultural Heritage Core Course)** An exploration of historical developments that dominated Western civilization from 1500 through the present. Emphasis will be placed on the role of politics, economics, culture, religion and ideology in shaping modern society in Europe and the United States.

201 HUM United States History to 1877 **WRI**
4.00 credits. **(Humanities Core Course)** An examination of the major developments in U.S. history from the age of discovery to 1877. This course will include a discussion of interpretations of the American past. **A Writing and Research Intensive Course.* Fall semester.

202 United States History Since 1877
4.00 credits. An examination of the major developments in U.S. history since 1877. This course will include interpretations of the American past.

208 Technology and Values in American Experience
4.00 credits. An effort to understand the values implicit in the choices that have been made in substituting a newer technology for an older technology throughout American history. Transportation, systems of production, the generation of power, medicine and armaments constitute areas of particular emphasis.

210 Europe Since 1870
4.00 credits. An examination of major political, social and cultural developments in Europe from 1870 to modern times.

215 British History: Themes and Topics
4.00 credits. Beginning with the Saxon invasions and extending through the modern empire, themes in this course will include English legal history, the common law and parliament; social and cultural life; the relation of England to Ireland, Scotland and Wales; the English reformation and Civil War; military and naval history; and the consolidation of empire.

220 The American Radical Tradition
4.00 credits. This course will offer a historical survey of the American Left, from the Founding generation to the present day. The study of politics, labor, gender,

race and intellectual change will all be utilized to explore a number of contested issues – socialism, black power, and the student movement – that have shaped this nation's past and informed its present.

224 History of Modern China
4.00 credits. This course traces China's history from the turbulent close of the dynastic era at the end of the 19th century through the present Communist period. Upon completion of the course, the student will be able to describe, explain and analyze diplomatic, political, social, economic and technological interactions between China and its Asian neighbors as well as between China and the West for the modern period.

225 History of Modern Japan
4.00 credits. This course traces Japan's history from the period of the Meiji Restoration in the mid-19th century to the present period. Upon completion of the course, the student will be able to describe, explain and analyze diplomatic, political, social, economic and technological interactions between Japan and its Asian neighbors as well as between Japan and the West for the modern period.

303 The Early Republic
4.00 credits. A study of American society in the Jeffersonian and Jacksonian periods. The course will emphasize the widening cultural and economic differences between the agrarian South and an increasingly industrial North.

304 The Civil War Era
4.00 credits. An examination of the political disintegration of the Union in the 1850s and the war between the states that followed. Particular attention will be given to the causes and legacy of the conflict.

306 Recent History of the U.S.
4.00 credits. An intensive analysis of the vexing economic, political, social and diplomatic forces responsible for shaping the American experience since 1900; conflicting interpretations emphasized.

307 American Economic History
4.00 credits. The growth and development of the American economy and its impact on human welfare. Emphasis is placed on the role of the entrepreneur, particular businesses, industrialization, government policy and labor. Agrarian endeavor and slavery, and periodic recessions and depressions, together with the problems of unemployment and reindustrialization are considered.

308 History in Literature
4.00 credits. An exploration of recent history (1900-2000) through the novel. This course will analyze how race, myth, power and class in the modern world have been interpreted by writers from around the globe. It will further assess how

literary movements have sometimes reflected and sometimes challenged the values of their societies.

309 American Intellectual History
4.00 credits. An examination of the major social and intellectual movements in the United States.

311 The Ancient World
4.00 credits. An examination of the history and interconnection of ancient regions, including Mesopotamia, Egypt, Assyria, Israel, Greece and Rome.

312 Rise of Europe, 400 - 1400
4.00 credits. An exploration of the growth of western Europe from its Greek and Roman heritage and the fall of Rome through the consolidation of the Church and Christianity, the rise of kingship and nationhood, the emergence of classes, and economic, social and cultural developments.

314 American Historiography
4.00 credits. This course will examine and analyze classical and contemporary theories that have shaped American historical writing. It will further explore how the social milieu – wars, revolutions, immigration and economic change – impacts the way history has been interpreted.

315 The Early Modern World: Religion, Renaissance and Encounter
4.00 credits. An examination of the religious, political, cultural and scientific changes in Europe between 1400 and 1750, with emphasis placed also on the Ottoman Empire, the encounter with America, the expansion into Asia and Africa, and other global realities.

316 Birth of the Modern Age (1600-1800)
4.00 credits. An analysis of an emerging, world-dominating Europe, with emphasis on the Enlightenment, the nation-state, global conflicts, civil wars and revolutions, and social, cultural and economic developments.

318 Overseas Chinese Communities
4.00 credits. In this course, we will trace the history of overseas Chinese communities during the modern era. Special attention will be paid to the Chinese communities in Hong Kong, Taiwan, Singapore and the United States. Upon completion of the course, each student will be able to describe, explain and analyze the effects of nationalism, citizenship and globalization on trans-national groups in general and the overseas Chinese in particular. **Prerequisite: HI 112 or HI 220 or permission of instructor.*

330 Studies in U.S. History
4.00 credits. An analytical inquiry into special periods and topics in American history.

340 Studies in European History
4.00 credits. An analytical inquiry into special periods and topics in European history, including courses on World War I and World War II.

360 Italian Renaissance
4.00 credits. The Italian Renaissance seminar is an in-depth cultural history of the humanist movement in Italy from 1250 to 1550 and its impact on the fine arts, literature, politics, religion, education and science. The course includes reading and discussion of primary texts by Petrarch, Dante, Boccaccio, Alberti, Machiavelli, Da Vinci, Michelangelo and Vasari. Topics include the revival of Antiquity, the discovery of Nature, Statecraft, scientific innovation and new concepts of genius and creativity. **Prerequisite: ART 155, ART 157, or HI 115.*

370-378 Special Topics in History
4.00 credits. Special subjects chosen as a response to student and faculty interest (e.g. Technology and American Society, and Urban History).

400 Senior Project
4.00 credits. Students who have been invited and accepted to participate in the Honors in the Discipline Program may register for this course in the semester in which the research or creative project is completed. *Completion of this course does not assure recognition for Honors in the Discipline. *See Department Chair for additional information. **Prerequisite: Invitation to Honors in the Discipline Program.*

471 Internship in Historical Studies
Variable (2.00, 3.00 or 4.00) credits. This course provides students with applied field instruction in history. Forty hours of on-site work is required for every credit hour granted. In addition to on-site work, students will complete writing assignments designed to promote reflection on the work experience. Register by Instructor.

480-489 Independent Study in History
Variable credit. Designed to offer an opportunity to use techniques of historical interpretation in specific problem areas. **Prerequisites: approval of the Department Chair, the Independent Study Committee, and permission of the instructor.* Register by Instructor.

490 Independent Research in History
4.00 credits. This independent research course focuses on a topic of mutual interest to the History major and Department mentor. The course may be initiated in the student's junior year but no later than the first semester of the senior year.

The course must be registered during the semester in which it will be completed. Register by Instructor.

Department of Mathematical Sciences (B.S.)

Hughes (Chair), Batakci, Doytchinov, Gochenaur, McDevitt, Sanchis, Thorsen, Wile

The major programs in Mathematical Sciences are designed to prepare students either for graduate study of mathematics, for secondary teaching of mathematics, or for employment in fields that make heavy use of mathematics, such as actuarial science, engineering or statistics. Service courses offered by Mathematical Sciences provide students in the physical, managerial, social and life sciences with the mathematical tools essential for their respective fields. Some of these courses also satisfy the College Core requirement in the area of Mathematics. Core courses in Mathematics are designed to help students discover the cultural significance of mathematics and its contribution to the modern world and to promote the development of proficiency with deductive reasoning, problem-solving strategies, computational skills and using mathematics to model real-world phenomena.

Majors Offered

The Department offers majors in **Actuarial Science** and **Mathematics**, with several possible concentrations.

Bachelor of Science in Actuarial Science

Actuarial Science majors are required to take Mathematics 121, 122, 201, 222, 235, 251, 252, 255, 256, 351, 352, 355, either Mathematics 331 or 362, and either Mathematics 457 or 458; Accounting 101; Economics 101, 102 and 309; and Business Administration 325. In addition, Computer Science 121 is required and should be taken as early as possible. Also required is evidence of successful completion, prior to graduation, of the Exam P or Exam FM examination of the Society of Actuaries (SOA). The completion of additional examinations is encouraged.

Bachelor of Science in Mathematics

All **Mathematics majors** are required to take a minimum of 43 credits in mathematics courses, including Mathematics 121, 122, 201, 222, 235, 301, 351 and 421. Acceptable mathematics electives are courses numbered 251 or above. In addition, Computer Science 121 is required and should be taken as early as possible. As part of these requirements, students may elect one of the following three concentrations:

The **Applied Mathematics concentration** provides a background in applied mathematics and statistics, enabling graduates to seek careers in government and industry, or to pursue graduate work in applied mathematics or statistics. The Applied Mathematics concentration requires three courses selected from Mathematics 321, 331, 352 and 362 and one course from acceptable mathematics electives; Computer Science 122; and Physics 200.

The **Pure Mathematics concentration** is designed to provide a foundation for successful graduate study in mathematics. The Pure Mathematics concentration requires Mathematics 425 and 441, and two courses from acceptable mathematics electives.

The **Secondary Education concentration** (Mathematics Education) is required for secondary education certification. Students in this concentration are given a solid foundation in geometry, algebra and statistics essential for effective teaching and analysis of the secondary school mathematics curriculum. In addition to the requirements above for the Mathematics major, the Secondary Education concentration requires Mathematics 341, either Mathematics 252 or 352, and two courses from acceptable mathematics electives; Education 105, 150, 241, 282, 305, 470 and 490; Physics 200; and two English courses (one writing and one literature).

Minor Offered

In addition to the two majors, the Department offers a **minor in Mathematics** that requires Mathematics 121, 122, 201, 235 and three additional 200-level or above courses.

Honors in the Discipline

The Department of Mathematical Sciences participates in the College Honors in the Discipline Program. For guidelines, students should consult the Department Chair.

Mathematical Sciences Courses

011 Intermediate Algebra
2.00 credits. An accelerated review of the fundamental algebraic and computational skills used in certain science courses and all math courses. Credits are not applicable to the 125 required for graduation. Fall semester.

105 MA Mathematics for Liberal Studies
4.00 credits. **(Mathematics Core Course)** An introduction to mathematical structures and applications designed to help students understand the historical and contemporary role of mathematics in everyday life. The course includes a

substantial review of algebraic concepts, and topics from other areas such as logic, set theory, number systems, probability, graph theory and matrix algebra. **Prerequisite: MA 011 or placement.* *No student who has received credit for a higher-numbered Mathematics course may enroll in MA 105.

110 MA College Algebra and Trigonometry

4.00 credits. **(Mathematics Core Course)** This course emphasizes algebraic and trigonometric concepts and their applications in the modern world, helping students prepare for further mathematical studies. The algebra of real numbers and the basics of trigonometry are studied in detail. Systems of equations, conic sections and sequences of real numbers are covered. **Prerequisite: MA 011 or placement.*

117 MA Concepts of Calculus

4.00 credits. **(Mathematics Core Course)** Designed to give students in the biological, social and management sciences a firm working knowledge of calculus. The approach is intuitive, with emphasis on applications. Topics include differentiation, curve sketching, optimization, logarithmic and exponential functions, and integration. **Prerequisite: MA 011 or placement.* Note: Students who have received credit for MA 121 may not enroll in this course.

121 MA Calculus I

4.00 credits. **(Mathematics Core Course)** A thorough introduction to the basic concepts and techniques of the differential and integral calculus of elementary functions, including a study of limits and continuity. Applications to the physical, biological and social sciences are studied in detail. **Prerequisite: MA 110 or placement.* Note: Students who have received four credits for MA 117 receive two credits for this course.

122 Calculus II

4.00 credits. A continuation of Mathematics 121 involving the calculus of the trigonometric, exponential, logarithmic and rational functions. Analytic geometry in the plane, parametric equations, polar coordinates, sequences and series are included, and an in-depth study of integration is completed. **Prerequisite: MA 121.*

201 Linear Algebra

3.00 credits. A presentation of the basic concepts and techniques of linear algebra including vectors, vector spaces, matrices, determinants, systems of linear equations, eigenvectors and linear transformations. Students will be expected to do mathematical proofs. **Prerequisite: MA 121.*

205 Fundamentals of Mathematics

3.00 credits. Topics include number properties, estimation, number theory, analyzing data, exploring chance and discovering geometric relationships. The

course provides a foundation in knowledge of mathematics essential for teaching in the elementary schools as recommended by the National Council of Teachers of Mathematics. **Prerequisite: completion of Mathematics Core requirement.*

222 Calculus III

4.00 credits. A continuation of Mathematics 122, completing the topics of the calculus sequence, including three-dimensional analytic geometry, vectors and vector valued functions, and calculus of functions of several variables. **Prerequisite: MA 122.*

235 Discrete Mathematics with Proofs

4.00 credits. Topics include logic, sets, functions, relations, mathematical induction, combinatorics and other counting techniques, graphs and trees. Special emphasis will be given to writing correct mathematical proofs. **Prerequisite: MA 122.* Spring semester.

251 MA Probability and Statistics

4.00 credits. **(Mathematics Core Course)** Covers the basic principles of descriptive statistics, experimental design and statistical inference. The primary objective of this course is to introduce students to statistical thinking and methodology, and their use in the natural and social sciences. This course includes an introduction to the use of the statistical software SPSS. **Prerequisite: MA 011 or placement.*

252 Statistical Methods in Research

3.00 credits. A continuation of the study of statistical techniques used for analyzing problems arising in the natural and social sciences. The statistical computer software SPSS will be used, and students will pursue a research project that requires the completion of a statistical analysis culminating in the writing of a research report. **Prerequisite: MA 251.*

255 Mathematics of Compound Interest

4.00 credits. This course introduces the mathematical foundations of interest theory and financial derivatives. Topics include: measurement of interest; annuities certain; yield rates; amortization schedules and sinking funds; bonds and related securities; yield curves, spot rates, and forward rates; convexity and immunization; derivative securities; forward contracts; put and call options, including put-call parity; hedging; futures; and swaps. This is a first course aimed at students preparing for the Actuarial Examination FM. **Prerequisite: MA 117 or 121.* Fall semester.

256 Problem Solving in Interest Theory

3.00 credits. This is an intensive course based on the theorietical knowledge obtained in Mathematics 255. Numerous practical examples and problems will

give the student a firm grasp of the underlying theory. The course is specifically geared towards the students' preparation for the Actuarial Examination FM. **Prerequisite: MA 255*. Spring semesters.

H270 HNR MA History of Mathematics

4.00 credits. **(Mathematics Core Course – Honors)** An examination of the history of mathematical thought from ancient times to the 20th century. Emphasis will be placed on the history of mathematical topics typically covered in the high school or early college curriculum. Register by Instructor.

H272 HNR MA Ethnomathematics

4.00 credits. **(Mathematics Core Course – Honors)** An interdisciplinary study of the relationship between mathematics and culture. The mathematical content includes topics from number systems, graph theory, algebra, probability and geometry, and the cultural component investigates the mutual influences of culture and math upon each other. This course includes a week-long trip to Mexico to explore Mayan ruins, culture and mathematics. Register by Instructor.

H275 HNR CE Mathematics in Music

4.00 credits. **(Creative Expression Core Course – Honors)** Participants will deepen and enrich their creative experience of music by learning about the principal ways that mathematical ideas are applied to the creation of music, and incorporating these ideas into their own creative repertoires. Of particular interest will be basic acoustical phenomena, tuning systems, and (especially) music theory and composition. Register by Instructor.

301 Abstract Algebra

4.00 credits. A study of algebraic structures, such as groups, rings, integral domains, fields, polynomial rings and ideals. Also included are topics from number theory, divisibility, congruence and construction of number systems. Selected advanced topics – such as series of groups, Sylow Theorems, unique factorization domains, and field extensions – also will be covered. **Prerequisites: MA 201and 235*. Fall semester.

321 Differential Equations

4.00 credits. A study of analytical, numerical and qualitative approaches to ordinary differential equations and related applications. A computer lab component is included, in which the software package Maple is used to create graphs, implement numerical methods, and assist with routine algebraic tasks in the context of more extended applied problems. **Prerequisites: MA 201 and 222*. Spring semester.

331 Operations Research

3.00 credits. A study of mathematical techniques and models used to solve problems from business, management and various other areas. Topics include

linear programming, integer programming, dynamic programming, queuing theory, decision analysis, network analysis and simulations. **Prerequisite: MA 201.* Fall semester, even-numbered years.

341 Modern Geometry

3.00 credits. The concept of geometry as a logical system based upon postulates and undefined elements, along with an appreciation of the historical evolution of geometries. Topics include incidence geometries, planes and space, congruence, inequalities, parallel postulates, parallel projections, similarities, circles and additional theorems. **Prerequisite: MA 235.* Fall semester, odd-numbered years.

351 Theory of Probability

4.00 credits. A comprehensive development of the theory of probability. Topics include the basic principles of combinatorial analysis useful in computing probabilities, conditional probability, independence of events, Bayes' Rule, discrete and continuous random variables, jointly distributed random variables, expected values and variances, and limit theorems involving sums of independent random variables. **Prerequisites: MA 222 and 235.* Fall semester.

352 Mathematical Statistics

3.00 credits. A study of principles of statistical inference in the theory of statistics, with an emphasis on estimation, hypothesis testing and nonparametric statistics. The objective of this course is to build a solid undergraduate foundation in statistical theory and to provide an indication of the relevance and importance of the theory in solving practical problems. **Prerequisites: MA 201 and 351.* Spring semester.

355 Problem Solving in Actuarial Science

3.00 credits. Fundamental mathematical tools for quantitatively assessing and managing risk are developed. A basic knowledge of calculus and probability is assumed. Specifically geared towards the student's preparation for the Actuarial Examination P. **Prerequisite: MA 351.* Spring semester.

362 Numerical Analysis

3.00 credits. A study of iterative methods suitable for computer programming that are useful in solving a variety of mathematical problems arising in the sciences, including actuarial science. Topics include solutions of equations in one variable, numerical integration, polynomial approximation, solution of linear systems, and numerical methods in matrix algebra. **Prerequisites: MA 201 and 222; CS 121.* Fall semester, odd-numbered years.

370-378 Special Topics in Math

Variable credit. Topics of special interest to advanced undergraduate mathematics students. **Prerequisite: permission of the Department Chair.* Register by Instructor.

400 Senior Project
Variable credit. An intensive, individual project, which must involve material not covered in regular course offerings, and be approved and guided by a faculty member. The student writes a paper (involving original exposition, original research or both) and presents her/his findings orally. To earn four credits for this course, a student must make an approved oral presentation outside of Elizabethtown College. Completion of this course does not assure recognition for Honors in the Discipline. **Prerequisite: Invitation to Honors in the Discipline.* Graded Pass/No Pass. Register by Instructor.

421 Real Analysis
4.00 credits. A rigorous study of the fundamental concepts of analysis, including such topics as sequences of real numbers, limits, continuity, differentiation and integration. **Prerequisites: MA 201, 222 and 235.* Fall semester.

425 Complex Variables
3.00 credits. A study of complex numbers, analytic functions, Cauchy's Theorem, the maximum modulus theorem, harmonic functions, power series, Laurent's series, calculation of residues, evaluation of real integrals, and conformal mappings. **Prerequisites: MA 222 and 235.* Spring semester, odd-numbered years.

441 Topology
3.00 credits. A rigorous introduction to the elements of point-set topology, including infinite cardinalities; abstract topological spaces; abstract continuity; separation and closure of sets in topological spaces; connectedness and compactness. More advanced topics in topology may be included as well, depending on time constraints and the interests of the instructor. **Prerequisites: MA 122 and 235.* Spring semester, even-numbered years.

457 Actuarial Models – Financial Economics
4.00 credits. A comprehensive development of the theoretical basis of certain financial models used by actuaries. Topics include interest rate models, rational valuation of derivative securities, and risk management techniques. **Prerequisites: MA 255 and 352.* Spring semester, even-numbered years.

458 Actuarial Models – Life Contingencies
4.00 credits. A comprehensive development of the theoretical basis of certain actuarial models and the application of those models to insurance and other financial risks. Topics include survival models, Markov Chain models, life insurances and annuities, and Poisson processes. **Prerequisites: MA 255 and 352.* Spring semester, odd-numbered years.

471 Internship in Mathematics
Variable credit. Opportunity for students to intern in a mathematical setting. Register by Instructor.

480-489 Independent Study in Math
Variable credit. **Prerequisite: approval of Department Chair and Independent Study Committee.* Register by Instructor.

Department of Modern Languages (B.A.)

Harman (Chair), Barnada, Bhattacharya, Linares-Farras, Lorenzen, Trachte

The study of a modern foreign language brings together practical training in language skills – understanding, speaking, reading and writing – with an understanding of the sociology, history and literature of the culture. The pragmatic virtues of a usable skill are joined with the humanistic values of liberal education.

The Department of Modern Languages offers programs of study that reflect its desire to encourage both mastery of one or more foreign languages and an overall appreciation of the cultural contexts in which they occur. The Department serves the Core Program, Bachelor of Arts degree candidates majoring or minoring in languages, students whose degree programs require studies in languages, and students who – for professional or personal reasons – wish to broaden their cultural background.

Majors

The Department offers majors in **French**, **German**, **Japanese** and **Spanish**. The requirements of a major may be met by completing 35 credits in one language above the 112 level. At least 20 credits for the major must be earned in residency and at least 15 credits must be earned through BCA Study Abroad or another Department-approved program. (For Japanese majors, at least 12 credits must be earned through the Nihon University Study Abroad Program or the BCA Study Abroad program in Sapporo.)

Language majors are required to participate in the BCA Study Abroad program (or another approved study-abroad program) for one academic year or the equivalent of two separate semesters. Non-majors who have completed 211 or above also are encouraged to participate in the BCA Study Abroad program or other approved study-abroad programs.

Modern Language majors in French, **German or Spanish** must complete the following courses: French/German/Spanish 211, 212, two 300-level courses, 495 and a minimum of 15 credits in the major in the BCA Study Abroad or other

approved study-abroad program, as specified below. Majors in French, German or Spanish must participate in the BCA Study Abroad or other approved study-abroad program for one year and the courses taken must include advanced conversation and composition (BCA 301), phonetics (BCA 302), French/German/ Spanish history (BCA 303), and French/German/ Spanish literature (BCA 304) for a minimum of 15 credits in the major. After completing the required course work, majors must take the oral proficiency interview and receive a minimum proficiency rating of Advanced. In exceptional cases, certain double majors who can prove that they cannot otherwise satisfy all requirements of both majors may apply for a substitution of one semester for the full-year, study-abroad requirement. Any double majors granted this exception must obtain a minimum proficiency rating of Advanced.

Modern Language majors in Japanese must complete Japanese 111, 112, 211, 212, 311, 312, 330, 331, and 495. Japanese majors must study abroad for one academic year and the courses taken may include the equivalent of Japanese 311 and 312 for a minimum of 12 credits in the major. After completing the required course work, Japanese majors must achieve level 3 of the Japanese Language Proficiency Test (JLPT) of the Japan Foundation. In exceptional cases, certain double majors who can prove that they cannot otherwise satisfy all requirements of both majors may apply for a substitution of one semester for the full-year, study-abroad requirement. Any double majors granted this exception must obtain a minimum proficiency rating of Advanced.

For all Modern Language majors, at least two of the required courses must be completed on the Elizabethtown College campus with members of the Department faculty. In addition, the senior research project (495) must be written on campus under Departmental faculty supervision.

Minors

Minors are offered in **French**, **German**, **Japanese** and **Spanish**. The requirements of a minor in French, German, or Spanish are: French/German/Spanish 211, 212 and two courses in the language at the 300 level. At least two of the four courses above must be completed on the Elizabethtown College campus. The remaining two courses may be completed on campus, in a BCA Study Abroad program, or in another well-established study-abroad program. After completing the required course work, students must take the oral proficiency interview and receive a minimum proficiency rating of Intermediate High/Level 1+.

The requirements for a minor in Japanese are: Japanese 111, 112, 211, 212, 311, and 312. Japanese minors may complete the 300-level courses at Nihon University Tokyo, Japan, or the BCA Study Abroad program in Sapporo. Japanese minors must achieve level 4 of the Japanese Foundation Proficiency Test.

General Information

International students with fluency in French, German, Japanese or Spanish may pursue a major or minor under certain circumstances. First, they must place into the 300 level at Elizabethtown College. Second, if they participate in the BCA Study Abroad Program, they must study only at the university level and must enroll in advanced literature or linguistics courses. Third, successful completion of the major or minor will be contingent upon the rating of Superior on the oral proficiency interview.

An online placement test is administered free of charge several times a year. It may be taken at other times by special arrangement for the general college fee. All students with one full year or more of language preparation must take the placement test before registering in language courses for academic credit. For further information, please consult the Modern Language Department's website or the Department Chair.

Honors in the Discipline

The Department of Modern Languages participates in the College Honors in the Discipline Program. For guidelines, students should consult the Department Chair.

ASL and ESL Courses

325 American Sign Language
2.00 credits. Basic competency in the use and comprehension of American Sign Language and to acquaint the learner with the cultural uniqueness of the deaf community.

111 English as a Second Language and American Culture
4.00 credits. Development and refinement of the student's functional proficiency through grammar and essay development, audio/video materials to improve listening comprehension, and extended oral discourse. Reading selections increase reading comprehension and awareness and understanding of American culture. **Prerequisite: Placement by examination and TOEFL score.*

112 English as a Second Language II
4.00 credits. Focuses on the improvement of speech, listening, reading and writing skills, emphasizing the descriptive and narrative paragraph. Audio and videotapes supplement the textbook and develop communicative competency. **Prerequisite: ESL 111.*

Modern Languages Courses

Courses in Chinese and other languages are offered depending on student interest and availability of staff.

Chinese Courses

111 PLO Fundamentals of Language and Culture I
4.00 credits. **(Power of Language Core Course)** Basic elements of structure and the phonetic system in culturally authentic contexts. The development in communicative competence in five skills: speaking, listening, reading, writing and sociocultural awareness. Audio and videotapes supplement proficiency-oriented textbooks. Communicative competence of about 50 Chinese characters is expected. Aimed at students with no prior knowledge of Chinese.

112 PLO Fundamentals of Language and Culture II
4.00 credits. **(Power of Language Core Course)** Expansion of basic elements of structure and phonetic system in culturally authentic contexts. Additional development of communicative competency in five skill areas: listening, speaking, writing, reading and sociocultural awareness. Communicative competence of further 50 characters is acquired. Audio and videotapes supplement proficiency-oriented textbooks. **Prerequisite: CHN 111.*

French Courses

111 PLO Elementary French I
4.00 credits. **(Power of Language Core Course)** Basic elements of structure and the phonetic system in culturally authentic contexts. The development of communicative competence in five skill areas: speaking, listening, reading, writing and sociocultural awareness. Audio and videotapes supplement proficiency-oriented textbooks.

112 PLO Elementary French II
4.00 credits. **(Power of Language Core Course)** Expansion of basic elements of structure and the phonetic system in culturally authentic contexts. Additional development of communicative competency in five skill areas: listening, speaking, writing, reading and sociocultural awareness. Audio and videotapes supplement proficiency-oriented textbooks. **Prerequisites: FR 111, or placement by examination.*

211 PLO Intermediate French I
4.00 credits. **(Power of Language Core Course)** Emphasizes functional proficiency. A functional-notational syllabus expands use of linguistic tasks such as asking questions, stating facts, describing, narrating and expressing feelings. Use of authentic cultural materials and contexts heightens sociocultural awareness.

Audio and videotapes supplement text and written materials. **Prerequisites: FR 112, or placement by examination.*

212 PLO Intermediate French II
4.00 credits. **(Power of Language Core Course)** Expanded use of linguistic functions. Introduction and development of more advanced tasks such as sustaining opinions, explaining, comparing and hypothesizing. Use of authentic cultural materials and contexts heightens sociocultural awareness. Audio and videotapes supplement texts and written materials. **Prerequisites: FR 211, or placement by examination.*

303 Reading Authentic Texts
3.00 credits. Development of and practice in reading authentic cultural, historical and literary texts; through the study of numerous strategies, training provided by textbook exercises, and immediate application to selections, students will learn how to read in order to read for the purpose of learning. **Prerequisites: FR 212, or permission of the instructor.*

311 Making of Modern French Society
4.00 credits. Analysis of important contemporary cultural phenomena and issues which have shaped and continue to shape the modern nation. Readings are taken from literary, sociological and political sources. Films, slides and audio and videotapes supplement written materials. **Prerequisites: FR 212, or permission of the instructor.*

323 Introduction to Literature
3.00 credits. Development of students' ability to read thoroughly, analyze and appreciate literature. Selected readings representative of different literary genres. **Prerequisite: FR 212, or permission of the instructor.*

370-378 Special Topics in French
Variable credit. Topics of special interest not otherwise covered in the curriculum. Topics depend upon student interest and faculty availability. **Prerequisite: FR 212, or permission of the instructor.*

480-489 Independent Study in French
Variable credit. For senior language majors. Independent projects in some area of language or literature. **Prerequisites: approval of Department Chair and Independent Study Committee.* Register by Instructor.

495 Senior Research Project
4.00 credits. For senior language majors. Involves researching a literary, linguistics or cultural topic and the writing of a major paper in the target language. This capstone experience will be closely supervised by Department faculty.

German Courses

111 PLO Elementary German I
4.00 credits. **(Power of Language Core Course)** Basic elements of structure and the phonetic system in culturally authentic contexts. The development of communicative competence in five skill areas: speaking, listening, reading, writing and sociocultural awareness. Audio and videotapes supplement proficiency-oriented textbooks.

112 PLO Elementary German II
4.00 credits. **(Power of Language Core Course)** Expansion of basic elements of structure and the phonetic system in culturally authentic contexts. Additional development of communicative competency in five skill areas: listening, speaking, writing, reading and sociocultural awareness. Audio and videotapes supplement proficiency-oriented textbooks. **Prerequisite: GER 111, or placement by examination.*

211 PLO Intermediate German I
4.00 credits. **(Power of Language Core Course)** Emphasizes functional proficiency. A functional-notational syllabus expands use of linguistic tasks such as asking questions, stating facts, describing, narrating and expressing feelings. Use of authentic cultural materials and contexts heightens sociocultural awareness. Audio and videotapes supplement texts and written materials. **Prerequisite: GER 112, or placement by examination.*

212 PLO Intermediate German II
4.00 credits. **(Power of Language Core Course)** Expanded use of linguistic functions. Introduction and development of more advanced tasks such as sustaining opinions, explaining, comparing and hypothesizing. Use of authentic cultural materials and contexts heightens sociocultural awareness. Audio and videotapes supplement texts and written materials. **Prerequisite: GER 211, or placement by examination.*

311 Making of Modern German Society
4.00 credits. Analysis of important contemporary cultural phenomena and issues that have shaped and continue to shape the modern nation. Readings are taken from literary, sociological and political sources. Films, slides, and audio and videotapes supplement written materials. **Prerequisite: GER 212, or permission of instructor.*

323 Introduction to German Literature
4.00 credits. Development of students' ability to read thoroughly, analyze and appreciate literature. Selected readings representative of different literary genres. **Prerequisite: GER 212, or permission of the instructor.*

370-378 Special Topics in German
Variable credit. Topics of special interest not otherwise covered in the curriculum. Topics depend upon student interest and faculty availability and may include "Business German" and "German Film." **Prerequisite: GER 212, or permission of the instructor.*

480-489 Independent Study in German
Variable credit. For senior language majors. Independent projects in some area of language or literature. **Prerequisites: approval of Department Chair and Independent Study Committee.* Register by Instructor.

495 German Senior Research Project
4.00 credits. For senior German language majors. Involves researching a literary, linguistics or cultural topic and the writing of a major paper in the target language. This capstone experience will be closely supervised by Department faculty.

Japanese Courses

111 PLO Fundamentals of Language and Culture I
4.00 credits. **(Power of Language Core Course)** Introduction to contemporary Japanese language designed for the acquisition of basic communication skills in listening, speaking, reading and writing. Two of the scripts, Hiragana and Katakana, will be introduced. Audio and videotapes supplement proficiency-oriented textbooks. Aimed at students with no prior knowledge of Japanese.

112 PLO Fundamentals of Language and Culture II
4.00 credits. **(Power of Language Core Course)** Building upon Japanese 111, focus will be on furthering oral and aural proficiency already acquired. Students will be introduced to Kanji and proficiency in about 50 of them will be acquired. **Prerequisite: JA 111, or placement by examination.*

211 PLO Communication through Language and Culture I
4.00 credits. **(Power of Language Core Course)** Further development of oral proficiency and reading and writing skills at the high elementary level of instruction. Proficiency in Kanji is increased to about 100. Japanese word processing is introduced. Designed to equip students with the ability to acquire Level Four of the Japanese Language Proficiency Test (JLPT) administered by the Japan Foundation. **Prerequisite: JA 112, or placement by examination.*

212 PLO Communication through Language and Culture II
4.00 credits. **(Power of Language Core Course)** Building upon Japanese 211, this course further enhances skills in listening, speaking, reading and writing and increases understanding of Japanese culture. Additionally an e-mail exchange program is introduced with students at Nihon University, Japan. Proficiency in Kanji is aimed at 250. **Prerequisite: JA 211, or placement by examination.*

245 NCH From Anime to Zen: Japanese Society, Business, & Culture WRI
4.00 credits. **(Non-Western Cultural Heritage Core Course)** This course provides a broad introduction to Japanese society and culture by experiencing daily life in Japan; visiting various religious, political and economic institutions of Japan; and taking classes in Japan on several important aspects of Japanese society and culture. The course is conducted in two parts, one involving a three-week trip to Japan in the summer with classes in the morning and field trips in the afternoon, and the second involving weekly meetings in the fall semester. **A Writing and Research Intensive course.* Register by Instructor.

311 Intermediate Japanese I
4.00 credits. Designed for student with credit in Japanese 212, this course aims at developing further control of the grammar, vocabulary and idioms of spoken Japanese with a proficiency in Kanji reaching 350. **Prerequisite: JA 212.*

312 Intermediate Japanese II
4.00 credits. This course trains students in intermediate Japanese skills in speaking, listening, reading and writing. With this course, the student will complete learning of all the basic grammatical patterns of Japanese language and will have the ability to acquire Level Three of the Japanese Language Proficiency Test (JLPT) administered by the Japan Foundation. **Prerequisite: JA 311.*

330 Advanced Japanese I
4.00 credits. Further development of proficiency in both rapid and close reading skills. This course focuses on readings from different fields such as anthropology, history, linguistics and literature. **Prerequisite: JA 312.*

331 Advanced Japanese II
4.00 credits. Analysis of important contemporary cultural phenomena and issues that have shaped and continue to shape the modern nation. Readings are taken from literary, sociological and political sources. Audio and videotapes supplement written materials. **Prerequisite: JA 330.*

370-378 Special Topics in Japanese
Variable credit. Topics of special interest not otherwise covered in the curriculum. topics depend upon student interest and faculty availability.

480-489 Independent Study in Japanese
Variable credit. For senior language majors. Independent projects in some area of language or literature.**Prerequisite: approval of the Independent Study Committee.* Register by Instructor.

495 Japanese Senior Research Project
4.00 credits. An extended research or translation project on a topic in Japanese literature, culture or language utilizing some primary source materials in Japanese.

Spanish Courses

111 PLO Elementary Spanish I
4.00 credits. **(Power of Language Core Course)** Basic elements of structure and the phonetic system in culturally authentic contexts. The development of communicative competence in five skill areas: speaking, listening, reading, writing and sociocultural awareness. Audio and videotapes and computer work supplement proficiency-oriented textbooks.

112 PLO Elementary Spanish II
4.00 credits. **(Power of Language Core Course)** Expansion of basic elements of structure and the phonetic system in culturally authentic contexts. Additional development of communicative competency in five skill areas: listening, speaking, writing, reading and sociocultural awareness. Audio and videotapes and computer work supplement proficiency-oriented textbooks. **Prerequisite: SP 111, or placement by examination.*

211 PLO Intermediate Spanish I
4.00 credits. **(Power of Language Core Course)** Review and expansion of basic Spanish grammar and vocabulary at the intermediate level in the four skills of speaking, listening, writing and reading. In-class work develops oral proficiency at the intermediate level; out of class work, including on-line assignments, and work with carefully selected website materials enhances writing and reading proficiencies. Sociocultural awareness is developed through audio and video resource materials that supplement proficiency-oriented materials. **Prerequisite: SP 112, or placement by examination.*

212 PLO Intermediate Spanish II
4.00 credits. **(Power of Language Core Course)** Continued review and expansion of basic grammar and vocabulary introduced in Spanish 211 in the four skills of speaking, listening, writing and reading. Development of more advanced tasks such as describing, narrating and hypothesizing. In-class work develops oral proficiency at the intermediate level; out-of-class work, including on-line assignments, and continued work with selected website materials enhances writing and reading proficiencies. Sociocultural awareness is developed through audio and video resource materials that supplement proficiency-oriented materials. **Prerequisite: SP 211, or placement by examination.*

305 Spanish Conversation
4.00 credits. Development and practice of oral skills for self-expression in Spanish. Emphasis on aural comprehension and fluency in the use of everyday Spanish. Small group discussions and oral presentations in Spanish based on current cultural, ethical and political topics will be the principal means of accomplishing this goal. **Prerequisite: SP 212, or permission of the instructor.*

311 Making of Modern Society
4.00 credits. Analysis of important contemporary cultural phenomena and issues which have shaped and continue to define modern Hispanic America and Spain. Cross-cultural influences, innovations and historical events that have shaped the modern nation will be studied. Readings are taken from literary, sociological and political sources. Films and laboratory assignments are required of each student in addition to work with supplementary audio and video materials. **Prerequisite: SP 212, or permission of the instructor.*

319 Spanish Linguistics
4.00 credits. Surveys current linguistic research on the structure and dialectal (sociological and geographic) variation of the Spanish language. A contrastive analysis of Spanish and English phonology, morphology, syntax and semantics develops the student's ability to understand the major structural differences between these languages. Students develop an appreciation of native speakers' perceptions regarding their own language. One hour per week in class and out of class assignments with audio materials are devoted to the development of native-live pronunciation. **Prerequisite: SP 212, or permission of the instructor.*

323 Introduction to Literature
4.00 credits. Development of students' ability to read thoroughly, analyze and appreciate literature. Selected readings representative of different literary genres. **Prerequisite: SP 212, or permission of the instructor.*

370-378 Special Topics in Spanish
Variable credit. Topics of special interest not otherwise covered in the curriculum. Topics depend upon student interest and faculty availability.

480-489 Independent Study in Spanish
Variable credit. Independent projects in some area of Spanish language or literature. **Prerequisites: approval of Department Chair and Independent Study Committee.*

495 Spanish Senior Research Project
4.00 credits. For senior Spanish majors. Involves researching a literary, linguistics or cultural topic and the writing of a major paper in the target language. This capstone experience will be closely supervised by Department faculty.

Department of Occupational Therapy (B.S., M.S.)

Carlson (Chair), Achenbach, Ericksen, Honaker, Humbert, Leimbach, Panchik, Potter, Salvadia, Waltermire

Occupational Therapy is a health profession that helps to improve the well-being and functions of people with developmental delay and physical and psychological dysfunction. The student in occupational therapy undertakes a program that integrates the humanities and the behavioral and physical sciences with professional study. The primary objective is to prepare the student as a generalist practitioner who is qualified for employment in hospitals, community agencies, schools, rehabilitation centers, extended-care facilities and related human services agencies. With this foundation, the beginning therapist can progress to specialized areas of clinical practice as well as research, administration and academia.

Elizabethtown College offers a combined BS/MS Occupational Therapy program that requires five years of academic study and six months of clinical fieldwork. The program awards both a **Bachelor of Science in Health and Occupation** and a **Master of Science in Occupational Therapy**.

Mission

To educate students to become highly qualified occupational therapy practitioners who can actively contribute to the profession through service, scholarship and leadership and to promote occupational justice for all people.

Core Values

The Core Values of the Occupational Therapy (OT) program are:

Exceptionally prepared entry-level master's occupational therapy practitioners. Educating practitioners who are able to engage in reflective practice based on clinical reasoning; who have a solid foundation of skills and knowledge; who demonstrate a thorough understanding of research and its relation to evidenced-based practice; and who value the ethos of professionalism and the ethics of life-long learning.

Human occupation. Emphasizing the understanding of human occupations across cultural and social groups and as they relate to the therapeutic process and healthy well-being. Occupational Therapy courses bridge the understanding gap between occupational performance and liberal arts learning through case studies, discussion and active learning.

Occupational justice. Emphasizing the right that all individuals have to maintain a healthy balance of meaningful occupations. This involves helping others to participate in meaningful and balanced occupations.

Globally aware students. Emphasizing the need for multicultural awareness and international understanding as a prerequisite for occupational therapy practice. International and service experiences enable our students to interact effectively in culturally diverse practice settings. Service-learning and civic engagement are valued components of our program.

Liberal arts foundation. Emphasizing the role of the liberal arts education in developing personal character, critical thinking, ethical problem-solving, and communication. Occupational therapy at Elizabethtown College has a proud tradition educating students for a professional discipline in a liberal arts environment.

Bachelor of Science in Health and Occupation

This degree serves as a prerequisite to the Master of Science in Occupational Therapy. Students completing only this course of study are not eligible to become registered occupational therapists, but have academic credentials that qualify them to be employed in health care and community settings.

The **Health and Occupation major** requires Occupational Therapy 111, 112, 223, 224, 227, 228, 318, 327, 329, 331, 427, 428, 429, 429P, 440, 450; Biology 111, 201, 202; Psychology 105 and 111; and Mathematics 251. Off-campus experiential learning includes service-learning and clinical placements.

Additional requirements for the Bachelor of Science in Health and Occupation:

All OT students (including transfers) must take Anatomy and Physiology (Biology 201 and 202) at Elizabethtown College.

OT students must achieve a grade of C- or higher in all required courses, including all courses with an OT prefix; Math 251; Psychology 105 and 111; and Biology 111, 201 and 202. Students may repeat courses in accordance with College policies. Students choosing to repeat a course required for the major are strongly encouraged to discuss repeat options with their academic advisors.

Students must achieve an overall cumulative grade point average of 2.00.

Requirements for admission into Level II Fieldwork and the Graduate Program:

OT students must achieve a minimum major grade point average of 3.00. Students achieving a major grade point average of 2.90-2.99 may appeal to the Academic Standing Committee (ASC) for an exception to this requirement. The ASC will determine whether a student in this situation may proceed to graduate study. Making an appeal does not guarantee admission into graduate study. Students with less than a 2.90 major grade point average may not appeal.

Students also must complete an essay to capstone their professional development in conjunction with their academic advisor. The purpose of this essay is to identify professional growth goals for entry-level practice as described by May, et al. (1995). No student will be excluded from the graduate program based on the essay. If the composition does not meet the required expectations, repeated drafts guided by the academic advisor may be necessary. Essays are due to the Department Chair by May 1.

Honors in the Discipline

The Department of Occupational Therapy supports many opportunities for students and academic recognition. The Department participates in the College Honors in the Discipline Program. Bachelor of Science students are notified of Honors eligibility during the junior year. Students with an Occupational Therapy grade point average of 3.50 or higher also are considered candidates for the national occupational therapy honor society, Pi Theta Epsilon.

Master of Science in Occupational Therapy

The **Master of Science in Occupational Therapy** requires one year of academic study and six months of clinical Level II Fieldwork with the requirements listed below. **To begin the master's program in Occupational Therapy, students must have successfully completed their bachelor's degree in Health and Occupation.** Successful completion of the Master of Science in Occupational Therapy affords the student the opportunity to take the National Board of Certification in Occupational Therapy (NBCOT) Exam and to become licensed to practice occupational therapy as an individual state requires. **Please note: a felony conviction may affect an individual's qualification to take the NBCOT certification exam.**

The Master of Science in Occupational Therapy requires Occupational Therapy 501, 502, 510, 528, 529, 551, 555 and a minimum of nine graduate electives credits. Additional requirements to attain the Master of Science in Occupational Therapy degree:

Maintain a minimum OT grade point average of 3.00.

Achieve a minimum grade of C- in all graduate courses. College policies on repeating courses apply to graduate study.

Students must pass both Level II Fieldwork experiences. Only one Level II failure may be repeated. Students are required to complete 24 weeks of full-time fieldwork or its equivalent of Level II fieldwork within 12 months of completing graduate coursework.

Level II Fieldwork

Fieldwork provides the student with the opportunity to apply clinical skills in occupational therapy practice settings. Fieldwork experiences usually occur the summer between the fourth and fifth year and following the fifth year. Elizabethtown College has established relations with more than 200 clinical sites locally and throughout the United States. Fieldwork Coordinators match students with appropriate settings based primarily on student career goals, student learning needs, and geographical considerations. Additional expenses for living and housing often are incurred as students complete Level II Fieldwork assignments. Individual fieldwork sites also may require students to meet health requirements (e.g., TB test, current immunizations, etc.), participate in training for Universal Precautions, and pass criminal and child safety background checks. Students must achieve a score of "Pass" from clinical supervisors in order to be eligible to attain the Master of Science degree. It is expected that most students would complete the fieldwork within 12 months of finishing coursework.

Professional Accreditation

Elizabethtown College's Occupational Therapy program has been fully accredited by the Accreditation Council of Occupational Therapy Education (ACOTE) since its initial accreditation in 1976, for more than 30 years of educational excellence. ACOTE can be reached at the following address: c/o American Occupational Therapy Association, Box 31220, 4720 Montgomery Lane, Suite 600, Bethesda, MD 20814-3425. The organization's phone number is (301) 652-2910. More information on ACOTE is available online at www.aota.org.

Occupational Therapy Courses

111 Basic Concepts in Occupation
4.00 credits. An introduction to the conceptual framework for understanding of the occupational and adaptive nature of humans, including concepts that constitute performance areas and those that environmentally influence individuals in performance. Students explore their own motivation, personalities, learning styles and values as a first step in considering themselves as therapeutic resources. Students also explore the beneficial aspects of activity, specifically the world of making and doing. They engage in reflection on the relationships between self

and activities and in the process of assessing and evaluating the interrelated elements of activities. **Prerequisite: permission of the instructor for nonmajors.* Fall semester. Register by Instructor.

112 Occupation as Therapy
4.00 credits. An introduction to disability and the use of occupation as therapy. Types and consequences of disability are explained. Students learn about the historical, philosophical and ethical development of the profession of occupational therapy. Roles and functions of occupational therapy personnel, the nature and processes of professional reasoning in the practice of occupational therapy, and the major theories related to occupational performance and occupational behavior are introduced. **Prerequisites: OT 111 and majors only.* Spring semester.

223 Development and Occupations of Childhood and Adolescence
4.00 credits. An examination of childhood development with a focus on occupational performance from conception through adolescence. An emphasis is placed on typical patterns of activity, holistically considering the biophysical, cognitive, and psychosocial aspects of development. Lab, community-based and service-learning opportunities will supplement lecture discussions and other active learning strategies. Fall semester.

224 Development and Occupations of Adulthood
4.00 credits. An examination of the developmental spectrum throughout the adult years. An emphasis is placed on occupational performance and how changing performance in biophysical, cognitive and psychosocial domains influence role satisfaction and performance. Community-based and service-learning opportunities supplement lecture discussions and other active learning strategies. **Prerequisite: OT 223, or permission of the instructor for nonmajors.* Spring semester.

227 Occupation Theory and Occupation Analysis
3.00 credits. An expansion of the concept of occupational performance as presented in Occupational Therapy 112. Exposure to and practice with a variety of occupational performance tasks in the areas of self-care, work/education and play/leisure throughout the life span. Emphasis is on analysis, adaptation and treatment implications. **Prerequisite or corequisite: OT 111.* Spring semester.

228 Group Process
2.00 credits. Provides opportunities for the student to experience and apply integrated knowledge related to group process and group dynamics. Group process is studied from a variety of perspectives. While an emphasis is placed on activity-focused therapeutic groups, attention also is given to normal group processes (such as interdisciplinary team functioning, committee group work, and/or staff meetings). Students enhance their ability to analyze personal, professional and clinical factors influencing effective group process. **Prerequisites or corequisites: OT 111 and 112; majors only.* Spring semester.

318 Kinesiology
4.00 credits. Application of the principles of functional anatomy with an emphasis on normal and abnormal movement. Measurement techniques for range of motion and muscle testing are presented. Concepts are integrated in lab experiences. **Prerequisite: BIO 201, or permission of the instructor for nonmajors.* Fall semester.

327 Pathology I
3.00 credits. Familiarizes students with common diagnoses, conditions and disorders encountered in the clinical practice of occupational therapy. An emphasis will be placed on understanding incidence/epidemiology, etiology, diagnosis, symptomatology, prognosis, and medical/educational/psychological interventions of selected neurological and/or psychological conditions. Spring semester. **Prerequisites: BIO 202; PSY 105, 111; OT 223, 224; and majors only.* Fall semester.

329 OT Practice I: Sensory and Cognitive Interventions
4.00 credits. Focuses on sensory and cognitive performance components that impact occupational performance areas. Students learn to apply the Occupational Therapy process to practice for individuals with sensory and/or cognitive deficits resulting from central nervous system disorders, peripheral nerve injury, head trauma, Alzheimer's disease, developmental disabilities and schizophrenia and other conditions. **Prerequisites: OT 112, 223, 224, 227, 228 and majors only.*

331 OT Process
2.00 credits. A guide through the occupational therapy process, including evaluation, treatment and discharge planning using case examples to explore clinical reasoning activities. An understanding of research as it influences the occupational therapy process is established. In addition, professional association guidelines for documentation, professional roles (e.g., COTA, OTR) and ethical concepts are applied to the occupational therapy process. **Prerequisite: OT 112.* Spring semester.

370-378 Special Topics in Health and Occupation
Variable credit. A series of courses with topics not otherwise covered in the curriculum. Offered when student interest and faculty availability justify. **Prerequisite: permission of the instructor.* Register by Instructor.

427 Pathology II
3.00 credits. Focus is primarily on physiological and motor disorders (including medical and surgical conditions) in addition to more complex conditions involving both neurological and physiological conditions. Emphasis on etiology, symptomatology, prognosis and treatment methods. **Prerequisites: BIO 202; PSY 111; OT 223, 224; and majors only.* Spring semester.

428 OT Practice II: Psychosocial Interventions
4.00 credits. Focuses on the application of psychosocial treatment in occupational therapy. Exposure to frames of reference and theories as guidance for clinical reasoning for persons of different ages with physical, cognitive and/or psychological disabilities. Special attention is given to persons with mental illness as the primary diagnosis. Theoretical concepts, evaluation tools and therapeutic techniques are integrated with fieldwork experience. **Prerequisites: PSY 105; OT 223, 224, 228, 327; and majors only.* Fall semester.

429 OT Practice III: Neuromusculoskeletal Assessment and Intervention
4.00 credits. Students learn to apply the occupational therapy process of evaluation, treatment planning, and treatment to people with deficits in musculoskeletal or neurological systems. **Prerequisites: BIO 201, 202; OT 318, 327, 331; and majors only.* Spring semester

429P OT Practice III: Aiding Performance in Neuromusculoskeletal Dysfunction
2.00 credits. Students learn the impact of neurological or musculoskeletal deficits on occupational performance and methods of remediation of function. **Prerequisites: BIO 201, 202; OT 318, 327, 331; corequisite OT 429; and majors only.* Spring semester.

440 Health Care Systems
3.00 credits. A study of the development of health care systems in the United States. Includes administrative structure, payment systems, quality assurance, regulations and legislative issues.

450 Research I
3.00 credits. This is the first in a two-course series designed to engage the learner in study of the research process, design and methodology related to the practice of occupational therapy. Students are expected to become critical consumers of research and are prepared to actively engage in the research process following course completion. Both qualitative and quantitative research designs are investigated. **Prerequisite: MA 151.* Spring semester.

475 Health Internship
0.00 credit. Alternative internship experience in a health setting that is approved by the Department of Occupational Therapy. This experience allows students to apply skills and knowledge gained through academic work in a related service agency, health care facility, or community setting. **Prerequisites: OT 329, 428 and corequisites: OT 429, 429P.*

480-489 Independent Study in Occupational Therapy
Variable credit. The purpose of this course is to offer advanced students opportunity to study specialized areas not otherwise included in the curriculum.

**Prerequisites: approval of the Department Chair and Independent Study Committee.*
Register by Instructor.

501 Master's Project I
2.00 credits. The first in a two-course series designed to allow students to explore in depth an area of interest and to complete a project of significance to the profession of occupational therapy. Projects will be clinical, service and/or research based. In this course, students will do a comprehensive review of relevant literature and will develop a proposal describing all project elements. Fall semester. Register by Instructor.

502 Master's Project II
4.00 credits. The second in a two-course series designed to allow students to explore in depth an area of interest and to complete a project of significance to the profession of occupational therapy. Projects are clinical, service and/or research based. Students complete all of the project elements as described in the proposal. The project results in a document appropriate for publication and in a formal oral presentation. **Prerequisites: OT 501, 551 and corequisite: OT 555*. Spring semester. Register by Instructor.

510 Administration, Management and Supervision
3.00 credits. An introduction to the principles of management in the provision of occupational therapy services. Focus is on developing skills in: program planning and evaluation; administration and management of occupational therapy departments and multidisciplinary programs and community agencies; and occupational therapy consultation with individuals and organizations. Topics include quality improvement, financial management, personnel management, leadership and team building. Fall semester. Register by Instructor.

528 Advanced Clinical Reasoning
3.00 credits. Students use advanced clinical reasoning to analyze a variety of complex cases from diverse populations and cultures. Students will synthesize procedural, interpersonal, environmental, pragmatic and cultural issues. Emphasis is given to advanced concepts and theories within the context of the students' accumulated knowledge and previous field-work experience. Fall semester. Register by Instructor.

529 Advanced Practice Issues
3.00 credits. A variety of advanced practice issues in the field of occupational therapy are covered. Students develop advanced knowledge in specialty areas of occupational therapy practice. Emphasis is given to ethical principles as they apply to occupational therapy practice. **Prerequisite: OT 528*. Spring semester. Register by Instructor.

541 Acute Care and Rehabilitation
4.00 credits. This course emphasizes the practice skills and knowledge essential to practicing in medical model acute and rehabilitation areas with applications to both adult and pediatric populations. Students will explore advanced study in technology, documentation and treatments of these traditional medical model practice venues. Advanced splint construction, hand therapy, physical agents/modalities, and other acute issues models will be studied. Case studies apply traditional occupational therapy practice to individuals with physical disabilities. **Prerequisite: B.S. in Health and Occupation or B.S. in Occupational Therapy.* Register by Instructor.

542 Preparation for Practice Elective
1.00 credit. This course provides a capstone experience that will synthesize the undergraduate preparation in the Practice Course series and further students' understanding of professional practice issues such as fieldwork supervision and life-long learning through continuing education. The focus of the course will be integration and synthesis of undergraduate curricular content related to attainment of certification and professional practice issues. **Prerequisite: B.S. in Health and Occupation or B.S. in Occupational Therapy.* Spring semester. Register by Instructor.

543 Topics in Gerontology Elective
4.00 credits. This course enables students to gain content knowledge and expertise in the practice area of interest. This elective emphasizes geriatric occupations, wellness and clinical practice. **Prerequisite: B.S. in Health and Occupation or B.S. in Occupational Therapy.* Fall semester. Register by Instructor.

544 Mental Health and Wellness Elective
Variable (2.00 or 4.00) credits. This course increases student knowledge of occupational therapy services in the context of health and wellness and mental health. Students will strengthen their understanding of the roles played by occupational therapists in these areas of practice, the theories that are applied and the contexts of occupational therapy in community-based practice areas. **Prerequisite: B.S. in Health and Occupation or B.S. in Occupational Therapy.* Register by Instructor.

545 School System Practice I Elective
4.00 credits. This course is the first in a two-course series designed to allow students to explore in depth the area of school-based practice. Students will learn and discuss current legislation governing therapy practice in general and special education in both public and private school arenas as well as best practice models for screening/evaluation, direct and consultative service delivery, and efficacy research. In addition to in-class lecture content, students will participate in seminars and service-learning or specialty fieldwork. **Prerequisite: B.S. in Health and Occupation or B.S. in Occupational Therapy.* Fall semester. Register by Instructor.

546 School System Practice II Elective
4.00 credits. This course is the second in a two-course series designed to allow students to explore in depth the area of school-based practice. Students will learn and discuss current legislation governing therapy practice in general and special education in both public and private school arenas as well as best practice models for screening/evaluation, direct and consultative service delivery, and efficacy research. In addition to in-class lecture content, students will participate in seminars and service-learning or specialty fieldwork. **Prerequisite: OT 545.* Spring semester. Register by Instructor.

548 Women and the Creative Process Elective
4.00 credits. This course uses experimental and collaborative feminist teaching methodologies to expose students to gender, class, race and cultural issues relative to women in the visual arts, as well as to occupational concepts regarding visual arts. Laboratory experiences will engage students in traditional and contemporary textile art media, with contemporary quilt-making serving as the unifying occupational element to integrate various textile art skills. **Prerequisite: B.S. in Health and Occupation or B.S. in Occupational Therapy.* Register by Instructor.

551 Research II
3.00 credits. Students are provided the opportunity to apply research concepts and knowledge to occupational therapy practice issues, and design and implement beginning-level research studies. Entry-level research experience that will empower students with the foundational skills necessary to engage in professional research is provided. Fall semester. Register by Instructor.

555 Publication and Grant Writing Seminar
3.00 credits. Students' skills in professional writing are developed to write professionally for target audiences by tailoring content and form to specifically stated guidelines (e.g. grant proposals, program evaluations, manuscripts for publication, Representative Assembly resolutions). Spring semester. Register by Instructor.

580 Master's Level Independent Study
Variable credit. Independent Study option for students in the Occupational Therapy Master's program. Register by Instructor.

591 Level II Fieldwork: Psychosocial Rehabilitation
0.00 credit. Twelve weeks of Level II Fieldwork experience in the area of pyschosocial rehabilitation. To be eligible to sit for the national certification examination, the student must achieve at least the minimum passing scores on the AOTA Fieldwork Evaluation. Further information on Level II Fieldwork can be found in the Department student handbook and the Level II Fieldwork Student Manual. **Prerequisites: B.S. needs to be completed, all graduate coursework, and CPR certification.* Graded Pass/No Pass. Summer or fall semester. Register by Instructor.

592 Level II Fieldwork: Physical Rehabilitation
0.00 credit. Twelve weeks of Level II Fieldwork experience in the area of physical rehabilitation. To be eligible to sit for the national certification examination, the student must achieve at least the minimum passing scores on the AOTA Fieldwork Evaluation. Further information on Level II Fieldwork is in the Department student handbook and the Level II Fieldwork Student Manual. **Prerequisites: B.S. needs to be completed, all graduate coursework, and CPR certification.* Graded Pass/No Pass. Summer or Fall semester. Register by Instructor.

593 Level II Fieldwork: Specialty
0.00 credit. Variable length of Level II Fieldwork experience in area of student's interest. Arranged on an availability basis. **Prerequisites: B.S. needs to be completed, all graduate coursework, and CPR certification.* Graded Pass/No Pass. Register by Instructor.

594 Graduate Internship
0.00 credit. A supplemental, non-credit-bearing fieldwork experience that is intended to provide opportunities for clinical development to cover the breadth of field experiences that the student should have for entry-level positions. This fieldwork is intended to be more intensive than a Level I fieldwork but not as comprehensive as Level II. A minimum time would be two weeks, but it is likely that the sites serving more involved clients will require a minimum of three weeks of full-time fieldwork to reach the target competency level. **Prerequisite: B.S. in Health and Occupation or B.S. in Occupational Therapy.* Offered as needed. Register by Instructor.

Department of Philosophy (B.A.)

Matteo (Chair), G. Ricci, Silberstein

Courses in the Department of Philosophy are designed to explore fundamental issues of knowledge, value and meaning. The program promotes critical inquiry into basic questions in epistemology, ethics, science, religion, aesthetics and metaphysics. The members of the Department are dedicated to an interdisciplinary approach to philosophical questions that transcend the confines of narrowly drawn disciplinary boundaries.

Our goal is to produce a comprehensive familiarity with the historical answers that have been proposed to these questions as a basis for students to develop their own critical perspectives. The study of philosophy challenges students to nurture the capacity for critical analysis through forceful, logical argumentation in clear and consistent forms of oral and written expression. Historically, philosophy has been central to an education in a liberal arts institution. Therefore, the program at Elizabethtown is designed to give students maximum opportunity to combine the

study of philosophy with other theoretical and practical disciplines in order to create a truly well-rounded undergraduate educational experience.

Our primary goal is to educate students who will not only go on to successful professional careers, but who also will cultivate the intellectual and moral fiber to live life well. A major in Philosophy is an excellent preparation for those going on to graduate school and for those planning professional vocations such as law. It will prove valuable in any occupation which demands clear thinking, effective communication and the ability to understand and harmonize divergent points of view. The Department of Philosophy stresses interdisciplinary study and students have flexibility in determining their own particular programs.

Majors Offered

The Department offers a major in **Philosophy**, with three possible tracks.

Bachelor of Arts in Philosophy

Students who major in philosophy follow one of three possible tracks: **Philosophy of Science**, **Professional Ethics** or **Humanities**. Each track combines six Department-based courses, three courses from outside the Department, and an interdisciplinary Senior Thesis.

Philosophy of Science track students normally will complete: Philosophy 110, 115, 201, 202, 213, a 370-level Special Topics Seminar in Philosophy of Natural or Social Science, and Philosophy 490. Students in the track also will be required to complete three sequential courses (100 to 300 level) in either Biology, Chemistry, Physics, Mathematics, Computer Science or one of the Social Sciences. The advisor for this track is Dr. Silberstein.

Professional Ethics track students normally will complete: Philosophy 110, 115, 201 or 202; and two courses from Philosophy 255A, 255B, 255C or 255D; a 370-level Special Topics Seminar in Ethical Theory; and Philosophy 490. Students in this track also will be required to complete three sequential courses in a professional area of study, such as Business, Communications or Education. The advisor for this track is Dr. Matteo.

Humanities track students normally will complete: Philosophy 105, 110, 201, 202, 315 or 320, a 370-level Special Topics Seminar in Philosophy of Art or Literature (Aesthetics), and Philosophy 490. Students in this track also will be required to complete three sequential courses in another branch of the Humanities – Religious Studies, Modern Languages, History, English and any of the Fine and Performing Arts. The advisor for this track is Dr. Matteo.

For all the Philosophy major tracks, students must inform Registration and Records of which discipline they are using for the sequential course requirement. The first 100-level, the first 200-level, and the first 300-level courses completed in the selected discipline will be used to fulfill the sequential requirement.

Minor

Students pursuing a **Philosophy minor** normally complete 20 credits including Philosophy 105, 110, 201 or 202, and one additional 200-level and one additional 300-level course in the Department.

Honors in the Discipline

The Department of Philosophy participates in the College Honors in the Discipline Program. For guidelines, students should consult the Department Chair.

Philosophy Courses

105 WCH Introduction to Philosophy
4.00 credits. **(Western Cultural Heritage Core Course)** A historical overview and a topical introduction to the Western philosophical tradition, the course concentrates on the most fundamental existential questions that confront us, and examines some of the great Western philosophers' answers to these questions throughout history. Great historical figures in Western philosophy such as Plato, Aquinas, Descartes and Hume are covered. Course topics and questions include: philosophy of religion, epistemology, metaphysics and ethics.

110 PLE Logic and Critical Thinking
4.00 credits. **(Power of Language Core Course)** An overview of the key skills necessary for being a critical thinker, writer and speaker and the various impediments to critical thinking as well as the pitfalls they can lead to, such as prejudice and authoritarianism. The student will learn the difference between mere rhetoric and persuasion on one hand, and cogent reasoning on the other. The student will be trained in both deductive and inductive patterns of reasoning, and learn to spot and evaluate such arguments in the wild – magazines, political speeches, advertising, etc. **Prerequisite: MA 011 (competency).* This course is open only to students with advanced English placement and cannot be taken by students who have received credit for English 150 to satisfy the Power of Language requirement.

111 PLO Introduction to Classical Greek
4.00 credits. **(Power of Language Core Course)** A first experience with the Greek language with focus on the language and its social and cultural context. Students will explore classical Greek literature in its original language.

115 HUM Ethics
4.00 credits. **(Humanities Core Course)** A study of the nature, origin and development of ethical theories from both an historical and contemporary perspective and their relevance to significant current moral dilemmas such as abortion, euthanasia, capital punishment and environmental issues. Special attention is given to the exploration of enduring moral concerns, such as moral realism versus relativism, egoism, altruism, the role of reason in ethics, and the nature of responsible moral decision making.

200 WCH History and Philosophy of Science
4.00 credits. **(Western Cultural Heritage Core Course)** This course will cover the nature of scientific laws and explanation, the problem of induction, realism, the Quine-Duhem thesis, falsifiability, instrumentalism, Ptolemaic astronomy, Copernican astronomy, Kepler's laws, the Aristotelian worldview, the Newtonian worldview, the special theory of relativity, the general theory of relativity, space-time structure, time travel, quantum theory, the EPR conundrum, quantum non-locality, and Bell's theorem. The material will be presented in historical context.

201 WCH History of Western Philosophy I
4.00 credits. **(Western Cultural Heritage Core Course)** Engagement in an in-depth survey of the central issues and thinkers in Western Philosophy in ancient, medieval and early modern periods. Special emphasis is placed on the works of major figures such as Plato, Aristotle, Augustine, Aquinas, Ockham and Descartes with a view toward exploring their respective positions on critical questions in epistemology, metaphysics, ethics, politics and aesthetics.

202 WCH History of Western Philosophy II
4.00 credits. **(Western Cultural Heritage Core Course)** This course engages in an in-depth survey of the central issues and thinkers in the modern and contemporary periods. Special emphasis is placed on major figures such as Kant, Locke, Hume, Hegel, Nietzsche, Wittgenstein and Heidegger with a view toward exploring their respective positions in regard to epistemology, metaphysics, ethics, politics and aesthetics. **Students who have completed PH 240 may not enroll in this course.*

213 Philosophy of Science
4.00 credits. Fundamental issues in the philosophy of science, such as the nature of scientific laws and explanation, the problem of induction, realism and anti-realism, and scientific progress will be treated. We will concern ourselves with questions such as: What claims are we justified in making within science? Do our best scientific theories give us a literally true account of the whole universe or an approximately true account? Are the entities studied by science really "out there in the world," or are they merely convenient fictions?

H234 HNR HUM Justice Through the Ages
4.00 credits. **(Humanities Core Course – Honors)** This seminar addresses the subject of justice as it has appeared in classical literature. Many of the readings involve the contest between positive law, enacted by the state, and what has been labeled natural or eternal law. The course begins with readings from the ancient world and concludes with modern-day readings on the subject. It also includes films that eloquently address the perennial problems associated with defining justice. Register by Instructor.

H255 HNR Environmental Ethics
4.00 credits. This course in environmental ethics familiarizes students with the range of positions that identifies the contemporary phenomenon of ecological consciousness. The historical framework for the course will highlight the perennial conflict between what environmentalists call First Nature (primordial physical nature) and Second Nature (culture and artifactual overlay). Spring semester. **Prerequiste: Honors course.* Register by Instructor.

255A Advanced Ethics: Business
4.00 credits. Business Ethics is part of a four-course sequence in Applied Ethics. In each course, a theoretical foundation for ethical discourse within the respective field is established. This course then proceeds to a detailed treatment of central ethical dilemmas in the actual practice of business.

255B Advanced Ethics: Medicine
4.00 credits. Medical Ethics is part of a four-course sequence in Applied Ethics. In each course, a theoretical foundation for ethical discourse within the respective field is established. This course then proceeds to a detailed treatment of central ethical dilemmas in the actual practice of medicine.

255C Advanced Ethics: Legal
4.00 credits. Legal Ethics is part of a four-course sequence in Applied Ethics. In each course, a theoretical foundation for ethical discourse within the respective field is established. This course then proceeds to a detailed treatment of central ethical dilemmas in the actual practice of law.

255D Advanced Ethics: Environmental
4.00 credits. Environmental Ethics is part of a four-course sequence in Applied Ethics. In each course, a theoretical foundation for ethical discourse within the respective field is established. This course then proceeds to a detailed treatment of central ethical dilemmas in the practice of public policy with regard to environmental use and protection.

305 Philosophy of Law (PS 305)
4.00 credits. An analysis of the major underlying philosophical issues of both criminal and civil law. Special attention is given to natural law theory, legal positivism, epistemological foundations of legal reasoning and interpretation, and the moral foundations of retributive and distributive justice.

315 Philosophy, Film and Literature
4.00 credits. An analysis of selected perennial issues in philosophy through the media of film and literature. Areas of investigation will include: the nature of Self and Reality, the nature of Knowledge, as well as issues in moral and political philosophy.

320 Philosophy of Religion
4.00 credits. A study of the various rational efforts to establish the validity of the religious perspective. Topics will include: the nature of religious experience, the relationship between faith and reason, the arguments for the existence of God, the problem of evil, the possibility of miracles and immortality, and the relationship between religion and ethics, and religion and science.

370-378 Special Topics in Philosophy
4.00 credits. A series of courses with topics not otherwise covered in the curriculum. Offered when student interest and faculty availability justify. **Prerequisite: permission of the instructor.*

480-489 Independent Study in Philosophy
4.00 credits. Advanced students have the opportunity to study specialized areas not otherwise included in the curriculum. **Prerequisites: approval of the Department Chair and Independent Study Committee.* Register by Instructor.

490 Senior Thesis in Philosophy
4.00 credits. An individualized study project involving research of a topic and the preparation of a major paper. The paper is presented orally to the Philosophy Department staff and interested persons. This is normally done during the senior year. Register by Instructor.

Department of Physical Education and Health

Latimore (Chair), Kauffman, Roderick, Schlosser, Straub, Sweger

The Department of Physical Education and Health prepares students for a lifetime commitment to physical activity and well-being with an emphasis on individual fulfillment. Courses in physical education: 1) develop positive attitudes and skills leading to physical fitness and health; 2) develop discipline and commitment to goals and, in team sports, to social and moral standards such as sportsmanship and teamwork; and 3) stress awareness of beneficial and harmful health practices as they relate to physical well-being and quality of life.

No more than four credits of physical education courses may be counted toward the graduation credit requirement.

Physical Education Courses

105 Swimming
1.00 credit. Instruction in the four basic strokes, survival swimming and water safety.

106 Water Aerobics
1.00 credit. Introduces the student to different means to obtain a cardiovascular workout in the water. Graded Pass/No Pass.

110 PE for the Elementary School Child
2.00 credits. A study of physical education at the elementary-school level, with instruction in games and activities that enhance the physical development of children ages 4 - 12. The course also focuses on teaching techniques and organizational skills. **Corequisite: PE 110L.*

110L PE Elementary School Child Lab
1.00 credit. Students must enroll in both the lecture (Physical Education 110) and the laboratory (Physical Education 110L) to receive credit. Graded Pass/No Pass. **Corequisite: PE 110.*

115 Physical Fitness and Wellness
1.00 credit. Instruction in cardiovascular-type activities, strength, flexibility, weight control, nutrition, myths, physical activity, injury prevention and rehabilitation, safety, fitness equipment, stress, relaxation, games, exercises and the consumer-personalizing fitness, aerobic exercises.

118 Lifeguarding
1.00 credit. Provides lifeguard candidates and current lifeguards with the knowledge and skills necessary to keep the patrons of aquatic facilities safe

in and around the water. Includes instruction in lifeguarding skills, CPR for the professional rescuer and first aid. Graded Pass/No Pass. Additional fee.

119 Scuba
1.00 credit. A total introduction to the use of scuba equipment and safety; includes work in the pool and classroom. Provides deep-water dive certification by the Professional Association of Diving Instructors (PADI). Graded Pass/No Pass. Additional fee.

120 Aerobics
1.00 credit. Inspiration – perspiration: a diversified fitness program that will give a complete workout. Graded Pass/No Pass.

125 Tennis
1.00 credit. Rules, playing techniques and skill development.

137 Outdoor Recreation
1.00 credit. Introduction to hiking, camping, orienteering and wilderness survival skills. Additional fee. Graded Pass/No Pass.

140 Bowling
1.00 credit. Rules, playing techniques and skill development. Graded Pass/No Pass. Additional fee.

146 Racquetball
1.00 credit. Rules, playing techniques and skill development.

150 Volleyball
1.00 credit. Rules, playing techniques and skill development.

161 Adapted Physical Education 1
1.00 credit. Individual activity or collective exercise adapted to needs and abilities of the student. Graded Pass/No Pass. Register by Instructor.

165 Golf/Badminton
1.00 credit. Rules, playing techniques and skill development.

175 Archery/Badminton
1.00 credit. Rules, playing techniques and skill development.

185 Basketball
1.00 credit. Rules, playing techniques and skill development.

190 Horsemanship
1.00 credit. Basic riding positions, balance and equine safety. Discuss equine behavior, care, tack, styles and management. Graded Pass/No Pass. Additional fee.

194 Skiing
1.00 credit. Graded Pass/No Pass. Additional fee.

195 Soccer
1.00 credit. Rules, playing techniques and skill development.

218 Water Safety Instruction
1.00 credit. This course follows American Red Cross certification procedures. Graded Pass/No Pass. Additional fee.

Department of Physics and Engineering (B.S.) (Including Earth Science)

DeGoede (Chair), Fullerton, Gravé, McBride, Scanlin, Stuckey, Watson, Wunderlich

The Department of Physics and Engineering's principal goal is to prepare graduating students to compete successfully for desired professional positions or to be accepted into highly selective graduate programs. This is achieved by challenging our students with a significant and complete education in engineering and the sciences within a close-knit, safe and personal environment, integrated by the rich atmosphere and liberal arts curriculum of the College. Our programs are born of a sense of cooperation between professors and students, and between student peers. In our cooperative environment, we motivate students to become increasingly self-aware, independent thinkers and to develop teamwork and communication skills. While technical and scientific competence is the bedrock of our students' competitiveness, students also develop distinctive traits of caring and collaboration, which are becoming increasingly important in a world striving for meaning, harmony and peace. The knowledge, skills and character development attained by our students yield a sense of self-assurance founded in professional success and personal fulfillment.

Majors Offered

The Department of Physics and Engineering offers majors in **Engineering**, **Computer Engineering**, **Industrial Engineering Management**, **Physics** and **Secondary Education in Physics (Physics Education)**. The Department also has a **cooperative 3+2 Engineering Program**, in which students study for three years at Elizabethtown College and then complete two additional years, normally at the College of Engineering at The Pennsylvania State University. In addition,

the Department participates in the General Science Education program, described in the Interdisciplinary Programs chapter of this Catalog.

Bachelor of Science Degree in Engineering

The **Engineering major** is a practical program designed to lead to a technical career in industry or graduate school in engineering. Our Engineering program is designed to prepare graduates who will (1) develop successful careers relating to the design, development and/or implementation of complex devices and systems within fields integrating electrical, mechanical and modern physics aspects; (2) meet the demands and challenges of the rapidly changing world and the global marketplace, researching and developing novel technologies to solve the problems and address market forces in society; (3) continue to develop their technical and professional skills throughout their careers; (4) display unwavering high ethical standards; and (5) contribute to the needs of and in other ways enhance their local communities and the world at large. Engineering majors are required to take Physics 200, 201, 202 and 302; Mathematics 121, 122, 201, 222 and 321; Engineering 100, 110, 210, 262, 263, 291, 310, 391, 395, 396, 400, 410-410L, 491 and 492; Computer Science 121; Chemistry 105; Earth Science 275; and Philosophy 255 (A, C or D). Engineering majors may substitute Physics 200 for one of their Natural and Physical Science Core courses. Students who successfully complete the requirements for the engineering major will have their Humanities Core requirement waived, and they may take up to 19 credits in up to three semesters at Elizabethtown without paying a credit overload fee.

Engineering majors also must select one of the following concentrations and complete the additional courses as noted:

Mechanical Engineering: Engineering 264, 321, 365 and 463.

Electrical Engineering: Engineering 220, 315, 351 and 352.

Applied Physics: Engineering 351 and 463; Physics 353 and 361.

Bachelor of Science Degree in Computer Engineering

The **Computer Engineering major** is offered in conjunction with the Computer Science Department and combines studies of engineering and computer technology, including both hardware and software. Our Computer Engineering program is designed to prepare graduates who will (1) demonstrate a working knowledge of mathematics, physics, electrical engineering and computer science by developing successful careers and/or postgraduate study relating to digital system design, embedded systems, computer architecture, software design and development and/or project management; (2) meet the demands and challenges of the ever-changing computer-related professions by assessing multiple

design solutions and finding creative applications of fundamental engineering principles; (3) adopt the scientific method as the cornerstone of their lifelong education and use their broad understanding of human institutions, achievement and values to become leaders in their chosen fields of endeavor; (4) display unwavering high ethical standards; and (5) contribute to the needs of and in other ways enhance their local communities and the world at large by applying problem-solving skills and critical and independent thinking to a broad range of projects that can produce technical innovation aimed at satisfying the future needs of society. Computer Engineering majors are required to take Physics 200, 201, 202 and 302; Computer Science 121, 122 and 221; Engineering 100, 110, 210, 220, 230, 310, 332, 333, 400, 410, 422, 433 and 494; Chemistry 105; Philosophy 255 (A, C or D); and Mathematics 121, 122, 201, 222 and 321. Computer Engineering majors may substitute Physics 200 for one of their Natural and Physical Science Core courses, and they may take up to 19 credits in up to three semesters at Elizabethtown without paying a credit overload fee. Students who successfully complete the requirements for the computer engineering major will have their Humanities Core requirement waived.

Bachelor of Science Degree in Industrial Engineering Management

The **Industrial Engineering Management major** is offered in cooperation with the Business Department and combines engineering physics with business administration. Our Industrial Engineering Management program is designed to prepare graduates who will (1) develop successful careers relating to the management, design, development and/or implementation of highly efficient complex industry systems; (2) meet the demands and challenges of the rapidly changing world and the global marketplace, researching and developing novel technologies to solve the problems and address market forces in industry; (3) continue to develop their technical and professional skills throughout their careers; (4) display unwavering high ethical standards; and (5) contribute to the needs of and in other ways enhance their local communities and the world at large. Industrial Engineering Management majors are required to take Physics 200 and 201; Engineering 100, 110, 210, 262, 391, 400, 411 and 492; and two of the following: Engineering 263, 264, 321 or Earth Science 275; Mathematics 121, 122, 201, 222 and 251; Accounting 270; Computer Science 121 and 341; Chemistry 105; Economics 101; either Economics 102 or Business Administration 380; Business Administration 265, 466 and either 330 or 333; either Business Administration 248 or Mathematics 331; English 282; Philosophy 255 (A, C or D); and Psychology 105. Industrial Engineering Management majors may substitute Physics 200 for one of their Natural and Physical Science Core courses. Students who successfully complete the requirements for the Industrial Engineering Management major will have their Humanities Core requirement waived, and they may take up to 19 credits in up to three semesters at Elizabethtown without paying a credit overload fee.

Cooperative 3+2 Engineering Programs (B.A.+B.S.)

Students in the 3+2 Engineering program complete three years at Elizabethtown College and two years at another institution, usually the College of Engineering at The Pennsylvania State University. Upon completion of course requirements, the Bachelor of Arts Degree is awarded by Elizabethtown College and the Bachelor of Science Degree by The Pennsylvania State University's College of Engineering. Students in the 3+2 Engineering program who maintain a 3.00 cumulative grade point average (3.50 for aerospace engineering, bioengineering, civil engineering and mechanical engineering) at Elizabethtown College are guaranteed admission to the College of Engineering at The Pennsylvania State University.

Students in the 3+2 Engineering program are required to take Physics 200, 201, 202 and 221; Engineering 100, 110, 210 and 262; Mathematics 121, 122, 201, 222 and 321; Chemistry 105; Computer Science 121; Economics 101; English 100 or 150, and 282; and three of the following six courses: Engineering 220, 263, 264 or 321; Physics 302 or 353. Students in the 3+2 Engineering program may substitute Physics 200 for one of their Natural and Physical Science Core courses. Students who successfully complete the Elizabethtown requirements for the 3+2 program will have their Social Science Core requirement waived. In addition, they may waive one additional Core course – not to include First-Year Seminar or any of the Core courses also required for the major – and are allowed to take up to 19 credits in up to three of the six semesters they study at Elizabethtown without paying a credit overload fee. Penn State also requires three physical education courses for students entering the 3+2 Engineering program.

Bachelor of Science Degree in Physics

The **Physics major** provides baseline preparation either for graduate school or for the technical job market. Our Physics program is designed to prepare graduates who will (1) develop successful careers relating to the study and advancement of our understanding of physics; (2) continue to develop their technical and professional skills throughout their careers; (3) display unwavering high ethical standards; and (4) contribute to the needs of and in other ways enhance their local communities and the world at large. Physics majors are required to take Physics 200, 201, 202, 302, 353, 361, 491 and 492; Mathematics 121, 122, 201, 222 and 321; Chemistry 105 and 113; Computer Science 121; Engineering 210 and 263; and two of the following: Physics 221; Earth Science 275; Engineering 220, 310, 315, 321, 351, 352, 365 or 463. Physics majors may substitute Physics 200 for one of their Natural and Physical Science Core courses.

Bachelor of Science Degree in Physics Secondary Education

A **Secondary Education major in Physics** is offered in conjunction with the Education Department and leads to Pennsylvania teacher certification at the

secondary level. Our Physics Education program is designed to prepare graduates who will (1) develop successful careers teaching secondary physics; (2) maintain their study of current work in theoretical and applied physics and bring that knowledge into their classrooms throughout their careers; (3) continue to develop their pedagogical skills throughout their careers; (4) display unwavering high ethical standards; and (5) contribute to the needs of and in other ways enhance their local communities and the world at large. Required courses for this major are: Physics 200, 201, 202 and 221; Earth Science 113 or 114; Engineering 210 and 321; Chemistry 105 and 113; Biology 101 and 103; Mathematics 121, 122 and 222; Computer Science 121; and Education 105, 150, 241, 282, 305, 470 and 490. Education certification also requires two English courses (one literature and one writing). The final professional portfolio (Education 490) must include two position papers on the ethical implications of contemporary physics. Physics Education majors may substitute Physics 200 for one of their Natural and Physical Science Core courses.

Minor Offered

Physics minors are required to take Physics 200, 201, 202, 221 and six additional credits in physics.

Honors in the Discipline

The Department of Physics and Engineering participates in the College Honors in the Discipline Program. For guidelines, students should consult the Department Chair.

Engineering Courses

100 Introduction to Engineering I
2.00 credits. Introduction to the study, practice and various branches of engineering, including problem solving, teamwork, project management, design, statistics, solution of equations, and technical writing. Includes a design project, guest speakers and plant tours. Hours: combined lecture/discussion/laboratory 4. Fall semester.

110 Introduction to Engineering II
2.00 credits. Introduction to graphical communication including sketching, ideation and computer-aided modeling. Development of mathematical techniques for engineering applications using Matlab, and a study of engineering ethics. Continued exploration of the engineering design process, including a design-and-build project. *Hours: combined lecture/discussion/laboratory 4. **Prerequisite: EGR 100*. Spring semester.

210 Circuit Analysis
4.00 credits. Introduction to linear circuit analysis and basic electric circuit

components. Topics covered include DC analysis, AC analysis and transient analysis for circuits containing resistors, inductors, capacitors and diodes. Hours: lecture 3, laboratory 3. **Prerequisite: PHY 201.* Fall semester.

220 Electronics
4.00 credits. Practical and theoretical study of fundamental components and circuits, including transistors, diodes, integrated circuits, power supplies, filters, amplifiers, control circuits and some digital electronics. Hours: lecture 3, laboratory 3. **Prerequisite: EGR 210.* Spring semester, even-numbered years.

221 Algorithms and Data Structures (CS 221)
4.00 credits. The design of algorithms for handling abstract data types, including stacks, queues, linked lists, trees and graphs is coupled with an introduction to complexity analysis, storage allocation and management. **Prerequisite: CS 122.* Fall semester.

230 Microcomputer Architecture (CS 230)
4.00 credits. Board-level design of microcomputers and the study of various computer architectures and hardware/software computing platforms. Topics include computer ethics, hardware components such as memory registers, central processor types, controllers, peripherals, input/output architecture and devices, memory management and networking. **Prerequisite: CS 122.* Spring semester.

262 Statics
3.00 credits. Equilibria of particles and rigid bodies subject to concentrated and distributed forces with practical applications to the design of mechanical structures. Topics include: structural analysis, internal forces, friction, inertial properties and virtual work. **Prerequisite: PHY 200.* Fall semester.

263 Dynamics
3.00 credits. Newtonian mechanics of particles, a system of particles and of rigid bodies in fixed and moving reference frames in three dimensions. Topics include: energy and momentum concepts, Euler's equations, and the simple oscillator. With applications to mechanical systems. **Prerequisite: PHY 202; prerequisite or corequisite: MA 222.* Fall semester, odd-numbered years.

264 Strength of Materials
4.00 credits. Deformation and behavior of materials under load to the point of fracture with applications to the design of physical systems. Topics include: axial stress and strain; torsion; pressure vessels; stresses in beams; elastic curves and deflection of beams; combined stress; buckling of columns; an introduction to energy methods. Includes a two-hour lab each week, including Finite Element Analysis. **Prerequisite: EGR 262.* Fall semester, even-numbered years.

275 Engineering and Environmental Geophysics (ES 275)
3.00 credits. The theory and application of geophysical imaging methods to the investigation of sub-surface materials and structures that are likely to have significant engineering and environmental implications. A wide variety of methods including: seismic reflection, seismic refraction, electromagnetic, ground-penetrating radar, potential fields, electrical resistivity, and borehold logging will be introduced and examined. **Prerequisites: PHY 201, MA 122.* Spring semester, even-numbered years.

280 Engineering Research/Project
Variable credit. A student may participate in an ongoing research or design project for academic credit. Registration for this course must be approved by the supervising faculty member and the Department Chair. Juniors and seniors are encouraged to submit proposals for Independent Study (Engineering 480-489). Can be taken Pass/No Pass. Register by Instructor.

291 Sophomore Project
1.00 credit. An engineering project performed in small teams with students enrolled in Engineering 110 and Engineering 391 and under the supervision of the instructor. Progress reports and a final report and presentation are required. Spring semester.

302 Electromagnetism (PHY 302)
3.00 credits. An intermediate course in electromagnetism including electro- and magnetostatics and dynamics, Maxwell's equations, macroscopic fields, electromagnetic waves and special relativity. **Prerequisite: PHY 201; Prerequisite or corequisite: MA 321.* Spring semester, odd-numbered years.

310 Signals and Systems
3.00 credits. Analysis of continuous-time linear systems, discrete-time linear systems, and methods of signal sampling and reconstruction. Applications of Fourier Series, Fourier Transform and Laplace Transform. Exploration of digital signal processing using Matlab programming. **Prerequisite: EGR 210.* Fall semester, even-numbered years.

315 Instrumentation and Measurement
3.00 credits. This course covers the modeling, analysis and design methods used in instrumentation, as well as the basic electronic hardware and software used for sensors and instruments. The course will involve hands-on lab projects designing and assembling simple instruments, studying and interfacing complex instruments, and using Labview and other software for interfacing/programming. **Prerequisite: EGR 210.* Spring semester, even-numbered years.

321 Thermodynamics
3.00 credits. Properties of pure substances, equations of state, laws of

thermodynamics applied to analysis of closed systems and control volumes. Emphasis on macroscopic thermodynamics and engineering applications. **Prerequisite: PHY 202, or permission of the instructor.* Spring semester, odd-numbered years.

332 Computer Organization and Architecture (CS 332)
4.00 credits. Introduction to Boolean algebra, design of combinational and sequential circuits, and their use in von Neumann computer architecture. Basic parts of computer systems including memory, control and input-output systems are studied. The student is expected to design a simple micro-programmed computer. **Prerequisite: CS 221.* Fall semester.

333 Digital Circuits and Computer Interfacing (CS 333)
4.00 credits. Digital logic and integrated circuits to implement logic; architecture and machine language programming of minicomputers and microprocessors; design, testing, and construction of instrument-to-computer and computer-to-instrument interfaces; design and testing of supporting software. **Prerequisites: CS 122 and 332, or permission of the instructor.* Spring semester, odd-numbered years.

351 Physics of Semiconductor Devices
3.00 credits. An introduction to semiconductor crystals and their properties; carrier modeling and action; fundamentals of carrier generation, transport, recombination and storage in semiconductors; principles of operation of p-n junction diodes, bipolar junction transistors, MOS field-effect transistors, MOS capacitors and some semiconductor photonic/optoelectronic devices. Device modeling is performed at a level that addresses basic physical principles and, at the same time, provides notions useful for integrated circuit analysis and design. **Prerequisite: PHY 201.* Fall semester, even-numbered years.

352 Fiber Optics Communication Systems
3.00 credits. Course includes an introduction to optics, fiber optics and optical communications. Among the topics covered in the course: an overview of geometric and wave optics; the optical fiber, optical confinement; step-index fibers and graded-index fibers; single-mode and multimode fibers; numerical aperture; loss, dispersion and nonlinearities in fibers; splices, connectors, couplers and gratings; optical transmitters, light sources and electronic driving circuits; optical receivers, detertors and noise, optical amplifiers; optic-link design, single-wavelength fiber-optic network topologies, standard fiber networks; wavelength-division multiplexing; soliton-link design. **Prerequisite: PHY 201.* Fall semester, odd-numbered years.

361 Applied Quantum Mechanics/Advanced Topics Applied Physics (PHY 361)
3.00 credits. An intermediate course in electromagnetism including electro- and magnetostatics and dynamics, Maxwell's equations, macroscopic fields,

electromagnetic waves and special relativity. **Prerequisite: PHY 201; Prerequisite or corequisite: MA 321*. Spring semester, odd-numbered years.

365 Fluid Mechanics
3.00 credits. Fundamentals of fluid dynamics for mechanical engineers. Topics include: fluid properties, fluid statics, control volume analysis, steady and unsteady Bernoulli equation, introduction to differential analysis of fluid flow. Laminar and turbulent flow in pipes and channels and in external flow. The boundary layer concept, life and drag. Includes an introduction to a commercial CFD package. **Prerequisites: PHY 202, EGR 263*. Spring semester, even-numbered years.

370-378 Special Topics in Engineering
Variable credit. An opportunity to offer courses that are not part of the regular curriculum.

391 Engineering Design and Junior Project
2.00 credits. This course explores design methodology and practice. The course includes topics such as problem recognition, customer needs identification, determining specifications, concept generation and evaluation/selection, full life cycle design, including design for the environment and zero waste concepts. Students are exposed to the formal tools required to generate design solutions, and practice applying these tools by undertaking a number of design case studies. A major component of this course is an engineering project performed in small teams with students enrolled in Engineering 110 and Engineering 291 and under the supervision of the instructor. Progress reports including a final report and presentation are required. Spring semester. Hours: lecture 1 and project work.

395 Fall Seminar
1.00 credit. Seminar series with weekly presentations of topics of current interest in engineering. Speakers include practicing engineers and researchers from industry or other academic institutions, Elizabethtown faculty, and senior-level Elizabethtown students. Fall semester.

396 Spring Seminar
1.00 credit. Seminar series with weekly presentations of topics of current interest in engineering. Speakers include practicing engineers and researchers from industry or other academic institutions, Elizabethtown faculty, and senior-level Elizabethtown students. Spring semester.

400 Engineering Portfolio
0.00 credit. The portfolio will provide students with a vehicle for documenting their achievements and competencies in engineering. Graded Pass/No Pass.

410 Control Systems
3.00 credits. Design and analysis of continuous time-domain control systems using

system modeling techniques and simulation software for control algorithms. Evaluation of control system performance and design criteria including feedback, stability, sensitivity, time and frequency response. Introduction to similar topics in the discrete-time domains. Includes a two-hour laboratory each week applying the theory to physical systems. **Prerequisite: MA 201, EGR 310, or permission of the instructor.* Spring semester, odd-numbered years.

410L Control Systems Laboratory
1.00 credit. A weekly two-hour laboratory applying the theory control systems to physical systems. **Corequisite: EGR 410.* Spring semester, odd-numbered years.

411 Current Industrial Engineering Methods
3.00 credits. Production management with emphasis on process improvement, cost reduction, incentives and ergonomics. Students also conduct preliminary work for their senior project. **Prerequisites: BA 248.* Register by Instructor. Fall semester, even-numbered years.

422 Operating Systems and Systems Programming (CS 422)
4.00 credits. An examination of the principles and theories behind the design of operating systems as well as their practical implementation. Topics include: executives and monitors, task handlers, scheduling algorithms, file handlers, device drivers and interrupt handlers, theories of resource allocation and sharing, multiprocessing and interprocess communication. **Prerequisite: EGR 332.* Spring semester, even-numbered years.

433 Advanced Computer Engineering (CS 433)
4.00 credits. Circuit level design and implementation of complete computer systems. Major laboratory projects require students to design, build, test and demonstrate computer hardware designs using Field Programmable Gate Arrays and bread boarded circuits. Class lectures include design of embedded systems, microcontrollers, microprocessors and supercomputers. Hours: lecture 3, laboratory 3. **Prerequisites: CS 221 and EGR 332, 333.* Spring semester, even-numbered years.

434 Artificial Intelligence and Robotics (CS 434)
4.00 credits. Robotics and machine intelligence including symbolic Artificial Intelligence (AI) and artificial neural networks. Symbolic AI uses programmed heuristics and forms of knowledge representation. Artificial neural networks are connectionist computer architectures where many computational nodes are connected to solve problems requiring rapid adaptation or where governing equations are not known or cannot be easily computed. Course includes mobile-robot and robotic-arm theory, applications, simulations, real-time control and path-planning strategies. **Prerequisites: CS 121 and MA 121.* Fall semester, odd-numbered years.

463 Analytical Mechanics and Vibrations
3.00 credits. Lagrangian formulations for three-dimensional motion of particles and rigid bodies. Linear free and forced responses of one and multi degree of freedom systems and simple continuous systems. Introduction to vibration control/absorption. **Prerequisite: EGR 263.* Spring semester, even-numbered years.

470 Engineering Internship
Variable credit. Opportunity for students to intern in an engineering setting. Register by Instructor.

480-489 Independent Study in Engineering
Variable credit. Study and experimentation in an area of interest to the student and faculty member. **Prerequisite: permission of the Independent Study Committee.* Register by Instructor.

491 Senior Project in Engineering I
2.00 credits. A demanding, and perhaps original, engineering project performed under close supervision of a faculty member. Students usually work in teams on the given project. For this course, the scope of the project typically includes problem definition, development of requirements, and preliminary design work. Progress reports, a final report and a public seminar are required. Register by Instructor.

492 Senior Project in Engineering II
2.00 credits. A demanding, and perhaps original, engineering project performed under close supervision of a faculty member. Students usually work in teams on the given project. For this course, the scope of the project typically includes detail and final design work and construction of a working prototype. Progress reports, a final report and a public seminar are required. Register by Instructor.

494 Senior Project – Computer Engineering
4.00 credits. A demanding, and perhaps original, engineering project performed under close supervision of a faculty member. Students usually work in teams on the given project. For this course, the scope of the project typically includes problem definition, development of requirements, and preliminary design work. Progress reports, a final report and a public seminar are required. Register by Instructor.

Physics Courses

103 General Physics I
4.00 credits. A study of the principles of physics, including mechanics (motion, equilibrium, work, energy and momentum), fluids, heat and oscillatory motion. Hours: lecture 3, discussion 1, laboratory 2. **Prerequisite: Level II math placement or*

completion of Math Core requirement. Students who have credit for Physics 200 may not enroll in this course for credit. Fall semester.

104 General Physics II
4.00 credits. Continuation of Physics 103. Topics include waves, sound, electricity and magnetism, geometric optics, and radioactivity. Hours: lecture 3, discussion 1, laboratory 2. **Prerequisite: PHY 103*. Students who have credit for Physics 201 may not enroll in this course for credit. Spring semester.

105 NPS How Things Work
4.00 credits. **(Natural and Physical Science Core Course)** Based on activities experienced in daily life, students will learn several physical concepts. By experiencing science at work students will become more comfortable with it and will understand the predictable nature of the universe and dispel the "magic" of science and technology. Students learn how various technologies work and will develop their physical intuition of the world. Topics may include: amusement park rides, bicycles, baseball, human movement, automobiles, clocks, musical instruments, audio amplifiers, radio, lasers, cameras, computers, copiers, power generation and distribution, and nuclear reactors. Course will include a laboratory component each week. Hours: lecture 3, laboratory 1.5.

200 College Physics I
4.00 credits. Introduction to the basic concepts of mechanics, classical kinematics and dynamics (linear and rotational motion, work and energy, impulse and momentum), friction, statics and universal gravitation. Hours: combined lecture/discussion 4, laboratory 2. **Prerequisite or corequisite: MA 121*. Students who have credit for Physics 103 may not enroll in this course for credit.

201 College Physics II
4.00 credits. A continuation of Physics 200. Introduction to the basic concepts of electricity and magnetism. Covering topics on fields, waves, potential, current, resistance, capacitance, inductance, direct current circuits, and alternating current circuits. Hours: combined lecture/discussion 4, laboratory 2. **Prerequisite: PHY 200*. Students who have credit for Physics 104 may not enroll in this course for credit. Spring semester.

202 College Physics III
4.00 credits. Introduction to oscillations, fluids, thermodynamics, geometric optics, interference, diffraction and special relativity. The laboratory introduces numerical analysis and iterative solutions. Hours: combined lecture/discussion 4, laboratory 2. **Prerequisite: PHY 200*. Fall semester.

215 Introductory Acoustics
3.00 credits. A study of the fundamentals of musical sound produced by wind and string instruments. The course covers vibrational and oscillatory motion, waves, types of sound, science and aesthetics, scales, pitch, beats, power and loudness, consonance, dissonance, chords and harmony. *Prerequisite: While they needn't be proficient, students must be able to produce specific notes (e.g., Bb or C#) on a wind or string instrument of their choice (to include human voice).*

221 Modern Physics (CH 343)
3.00 credits. Twentieth-century developments in the structure of the atom. Topics include X-rays, radioactivity, atomic spectra, blackbody radiation, introduction to quantum theory emphasizing the extranuclear structure of the atom, elementary particles, nuclear structure and transformations. **Prerequisites: PHY 201, MA 122.* Fall semester.

302 Electromagnetism (EGR 302)
3.00 credits. An intermediate course in electromagnetism including electro- and magnetostatics and dynamics, Maxwell's equations, macroscopic fields, electromagnetic waves and special relativity. **Prerequisite: PHY 201; Prerequisite or corequisite: MA 321.* Spring semester, odd-numbered years.

353 Advanced Physics Laboratory (CH 353)
3.00 credits. Experimentation, data acquisition, data analysis and technical presentations appropriate for the physical and chemical sciences. Emphasis on statistics of physical/chemical experimental data and computer methods of analysis, including electronic laboratory notebooks and computer networks. Hours: lecture 2, laboratory 6. **Prerequisites: PHY 201, MA 121.* Fall semester.

361 Applied Quantum Mechanics/Advanced Topics Applied Physics (EGR 361)
4.00 credits. Course offers an introduction to applied quantum mechanics, including a review of the origins of quantum mechanics, basic concepts and postulates, Schrodinger equation, simple one dimensional potentials, potential wells, tunneling, Bloch theorem, harmonic oscillators, the hydrogen atom model, crystal structure, reciprocal lattice, Brillouin zone, band theory, effective mass, quantum statistics, Fermi level, thermal properties of crystals and phonons, basic charge transport, interaction with radiation, perturbation theory, and laser physics. The course is integrated by a weekly one-hour seminar, during which students will present summary of their overview/research efforts on advanced topics. **Prerequisite: PHY 202.* Fall semester, odd-numbered years.

370-378 Special Topics in Physics
3.00 credits. Topics in physics not covered in other courses. Register by Instructor.

423 General Relativity
3.00 credits. An introduction to calculus on manifolds, differential topology, exterior calculus, affine geometry, Riemannian geometry, special relativity and general relativity with applications to relativistic cosmology. **Prerequisites: MA 122 and 201, or permission of instructor.* Offered as needed.

480-489 Independent Study in Physics
3.00 credits. Study and experimentation in an area of interest to the student and faculty member. **Prerequisites: approval of Department Chair and Independent Study Committee.* Register by Instructor.

491 Physics Research I
2.00 credits. An original experiment or theoretical investigation performed under the close supervision of a faculty member. A written thesis and a public seminar are required. Hours: laboratory 6. Register by Instructor.

492 Physics Research II
2.00 credits. An original experiment or theoretical investigation performed under the close supervision of a faculty member. A written thesis and a public seminar are required. Hours: laboratory 6. Register by Instructor.

Earth Science Courses

113 NPS Earth in Space: Evolution of a Planet
4.00 credits. **(Natural and Physical Science Core Course)** A broad introduction to Earth System Science that integrates basic topics in geology and astronomy as a means to understand the origin and evolution of planet Earth. Dramatic events and processes that shaped Earth's history, such as big bang cosmology, stellar evolution, planetary formation, plate tectonics, the rock cycle, crustal deformation and mountain building, the evolution of continents and ocean basins, earthquakes and volcanism are explored. Includes discovery-oriented exercises, including field trips to local geological sites, the local planetarium and several stargazing sessions for firsthand study of materials containing evidence for the processes and events studied in class. Hours: lecture 3, laboratory 2. Fall semester.

114 NPS Geosystems: Landscapes, Oceans and Atmosphere
4.00 credits. **(Natural and Physical Science Core Course)** Introduction to geology and meteorology, presenting Earth as an intricately coupled system that makes life possible. Landscapes, plate tectonics, oceans and atmosphere, chaos and weather prediction, climates and patterns of change, and landscape modification by the hydrologic system. Discovery-oriented lab includes field trips to geological sites. Hours: lecture 3, laboratory 2. Spring semester.

H215 HNR NPS Meteorology **WRI**
4.00 credits. **(Natural and Physical Science Core Course – Honors)** An introductory, yet comprehensive course about the atmosphere: causes, effects and geographic distribution of weather/climate. Scientific basis for meteorology, up to and including special emphasis on how the changing world of weather may affect our atmospheric environment. Hours: lecture/discussion: 4. **A Writing and Research Intensive course.* Spring semester. Register by Instructor.

216 Physical Geography
3.00 credits. Introduction to the physical bases for geography, including earth/sun relationships, map projections, weather patterns, climates and landforms. **Prerequisite: education major or permission of the instructor.* Spring semester.

275 Engineering and Environmental Geophysics (EGR 275)
3.00 credits. The theory and application of geophysical imaging methods to the investigation of sub-surface materials and structures that are likely to have significant engineering and environmental implications. A wide variety of methods including: seismic reflection, seismic refraction, electromagnetic, ground-penetrating radar, potential fields, electrical resistivity, and borehold logging will be introduced and examined. **Prerequisites: PHY 201, MA 122.* Spring semester, even-numbered years.

Department of Political Science (B.A.)

McClellan (Chair), Ayres, Gottfried, Hendrickson, Kelly-Woessner, McDonald, Ozkanca

The Department of Political Science is dedicated to promoting scholarship, leadership and civic involvement. Grounded in the liberal arts, the Political Science major exposes students to the principal subfields of the discipline – American government, comparative government, international relations, political theory, public administration and research methods – and develops writing, oral expression, and analytical and critical-thinking skills.

A major in Political Science prepares students for careers in law, public administration, management, campaigns and elections, issue advocacy, communications, the diplomatic corps and many other exciting fields in the public, private and nonprofit sectors. Beyond its worth in career terms, the study of politics and government can lead to more effective pursuit of a person's political interests as a civic responsibility or as an avocation.

Majors Offered

The Department offers a major in **Political Science**. It also participates in the **Social Studies Certification program**, the **Forestry and Environmental**

Management major and the **Environmental Science major**, offering a public policy concentration.

For information about the American University Washington Semester Program or internship opportunities in Harrisburg through the Department's Capital Semester Internship Program (Political Science 471), students should contact Dr. McClellan.

Bachelor of Arts in Political Science

The **Political Science major** requires the following courses: Political Science 111, 150, 223 or 224, 230, 245 and 498; an additional 20 credits of political science courses; and participation in a for-credit experiential learning or off-campus study program approved by the Department and the Office of Registration and Records. Examples of such programs include: the Department's Capital Semester Internship Program (Political Science 471), the Queen's University International Study Centre at Herstmonceux Castle, the American University Washington Semester Program, BCA Study Abroad programs, the Elizabethtown College Oxford University Summer Program, and May term international experiences sponsored by individual faculty and Departments. Approved political science courses in these off-campus programs will count toward the major.

Minor Offered

A **Political Science minor** requires 20 credits of course work. The following courses are required: Political Science 111, 150 or 245, 223 or 224, and eight additional credits in political science, at least four of which must be at the 300 or 400 level.

Honors in the Discipline

The Department participates in the College Honors in the Discipline Program. For guidelines, students should consult with Dr. Kelly-Woessner, Departmental Honors Coordinator.

Political Science Courses

111 SSC American National Government
4.00 credits. **(Social Sciences Core Course)** Analysis of the development of the U.S. Constitution, the federal system, civil rights and liberties; public opinion, political organizations, and elections; the presidency, Congress, federal bureaucracy and courts; and the public policy-making process.

150 NCH Introduction to Comparative Politics
4.00 credits. **(Non-Western Cultural Heritage Core Course)** A comparison and contrast of the political systems of selected foreign nations, emphasizing the historical development of party systems, political cultures and executive-legislative relations. Spring semester.

205 WCH Western Political Heritage **WRI**
4.00 credits. **(Western Cultural Heritage Core Course)** A critical assessment of the ideas and selected original works of leading Western social and political thinkers since Plato. Justice, equality, war and peace, rights, freedom, order and community are among some of the ideas to be examined from a variety of critical and historical perspectives. This course is for nonmajors only. **A Writing and Research Intensive Course.*

211 SSC Political Psychology **WRI**
4.00 credits. **(Social Science Core Course)** This interdisciplinary course explores the intersection between political science and psychology. It introduces students to psychological theories and research findings in order to explain what people think, feel and do about contemporary political issues. Specifically, the course draws on psychological concepts regarding motivation, personality, cognition, attribution, emotion and identity to examine mass political behavior and public opinion. **A Writing and Research Intensive course.*

223 History of Western Political Thought I: Ancient to Renaissance
4.00 credits. A survey of major political thinkers from Plato through Machiavelli. Self, politics, nature, order and freedom are among the topics examined. Fall semester.

224 History of Western Political Thought II: Enlightenment to Modern
4.00 credits. Major political thinkers in the West and their writings from Thomas Hobbes to the present. Self, justice, equality, rights, sovereignty and freedom are among the topics examined. Spring semester.

225 HUM Politics in Film and Fiction: Democracy in America
4.00 credits. **(Humanities Core Course)** An examination of democratic theory through major films and novels depicting the American political experience from the 1930s to the present. Questions to be explored include whether political elites are accountable to the general public, whether mass control of government is desirable, and how democracies should deal with evil.

230 Research Methods
4.00 credits. Techniques of empirical political research and the development of modern methods of analysis and data presentation in political science with reference to contributions from other social sciences. A major research project on methodology is required. Spring semester. Register by Instructor.

245 NCH International Relations
4.00 credits. **(Non-Western Cultural Heritage Core Course)** Survey of the basic units of analysis, concepts and principles of global international relations with emphasis on the formulation and implementation of foreign policy in the context of political, economic, military and cultural factors.

252 NCH Latin American Society
4.00 credits. **(Non-Western Cultural Heritage Core Course)** A study of Latin American sociocultural formation in its historical, political and economic dimensions with comparison to and contrast with the United States' experience and consideration of current social issues.

301 Mock Trial I
1.00 credit. To prepare and conduct a criminal jury trial in the American Mock Trial Association regional and national competition. **May only be taken once for credit.* Fall semester. Register by Instructor.

302 Mock Trial II
1.00 credit. To prepare and conduct a criminal jury trial in the American Mock Trial Association regional and national competition. **Prerequisite: PS 301 in the same academic year. *May only be taken once for credit.* Spring semester. Register by Instructor.

303 Constitutional Law I: Institutions
4.00 credits. This course examines the Supreme Court's interpretation of the powers granted by the U.S. Constitution to the institutions of the federal government. Topics include the power of judicial review, constraints on judicial power, the sources and scope of Congressional power, the domestic powers of the President, the President and foreign affairs, and the separation of powers. Fall semester.

304 Constitutional Law II: Rights and Liberties
4.00 credits. This course examines the Supreme Court's interpretation of the protections provided by the U.S. Constitution against governmental intrusion on our civil liberties. Topics include First Amendment issues, such as freedom of speech, freedom of religion, and the establishment clause; 14th Amendment issues, such as right to privacy; discrimination based on race, gender, and sexual orientation; and remedies for discrimination such as affirmative action. Spring semester.

305 Philosophy of Law (PH 305)
4.00 credits. An analysis of the major underlying philosophical issues of both criminal and civil law. Special attention is given to natural law theory, legal positivism, epistemological foundations of legal reasoning and interpretation, and the moral foundations of retributive and distributive justice.

313 The American Presidency
4.00 credits. An examination of the development of the modern presidency as institution, symbol and policymaker. Topics to be covered include the nature of presidential power, the institutional presidency, relations with the public and governmental institutions in the United States, and policy leadership in foreign and domestic affairs. **Prerequisite: PS 111.*

314 Legislative Process and Behavior
4.00 credits. An exploration of the American legislative process, operating procedures of the United States Congress, and factors that influence congressional decision making, including constitutional constraints, congressional rules and members' own drives and ambitions. A substantial portion of the course will emphasize the techniques and methods researchers employ in the study of Congress. **Prerequisite: PS 230, or permission of instructor.*

315 Public Opinion and Political Behavior
4.00 credits. An examination of opinion formation and predictors of political behavior. Topics include measurement of public opinion, stability and strength of opinions, the impact of public opinion on the political process, mass political behavior, voting behavior and collective action dilemmas. **Prerequisites: PS 230, or permission of the instructor.*

316 The American Electoral Process: Campaign 2008
4.00 credits. Analysis of the process of recruiting, nominating and electing candidates for national office in the United States., the major participants in national elections, and the impact of elections on public policymaking.

318 Mass Media and American Politics
4.00 credits. Analysis of the role and influence of the mass media in American politics, emphasizing the development of the media industry and its relations with government, the political communications process, and the impact of the media on public opinion, elections and public policymaking.

323 Politics Through Film and Literature
4.00 credits. A study of political novels and films and how these art forms have significantly shaped our understanding of politics. Democracy, totalitarianism, social inequality, terrorism, justice and the rule of law are among some of the topics examined.

324 Modern Ideologies
4.00 credits. A survey of Marxism, socialism, anarchism, liberalism, libertarianism, Islamic fundamentalism, feminism and conservatism, and an analysis of the motives and goals of their major proponents.

326 American Political Thought
4.00 credits. Historical analysis of major American political thinkers from the Puritans to the present with special consideration given to the founding principles of the American republic.

328 Politics and Religion
4.00 credits. Analysis of the relationships between forms of government and religious attitudes and practices with emphasis on the influence of religion on political life and of religious interpretations of politics.

329 American Democracy and Its Critics
4.00 credits. An exploration of recent critical literature on American democracy and on contemporary democratic regimes in general. Discussions will center on the similarities and differences among the political commentators who will be featured.

345 American Foreign Policy
4.00 credits. Emphasis on the 1990s and beyond, with consideration of major international challenges and opportunities facing the United States, social and governmental processes in foreign policy decision making, and the large role of American society and the private sector in the United States' presence in the world.

348 Public International Law
4.00 credits. Interactions among governments, organizations and individuals in the world community regarding the sources and modern development of international law.

350 European Union Simulation (BA 350)
4.00 credits. Study of the principles and theories of European integration, the history of the current European Union (E.U.) from the Treaty of Rome to the present, and the structure and functioning of the European Union, including class participation representing an E.U. Member State in the annual Mid-Atlantic European Union Consortium E.U. Simulation in Washington, D.C. Fall semester.

360 Washington Institute (BA 360)
4.00 credits. The course highlights relationships between the legislative, executive, independent agencies and third-party institutions that directly affect how policy is made in the United States. The course exposes students to the mechanism that is used to formulate policy for the United States. The Institute will focus heavily on International policy and the inner workings of the various institutional agents that participate in the process of making policy. Students will observe and develop a critical sense of how to weigh the various interests before policy is ultimately made. Students will learn to examine the purpose of policy and evaluate how it will impact various industries. **Prerequisite: BA 101.*

361 Public Administration
4.00 credits. A study of the role and influence of executive branch departments and agencies in American politics, government and policymaking. Differences between public and private sector leadership, decision making, communications, organization, budgeting and human resource management will be emphasized. Fall semester.

363 American Domestic Policy
4.00 credits. An examination of the development and impact of selected public policies in health care, welfare, education, energy and the environment. Students will conduct policy analyses, making use of information resources in the Harrisburg area.

365 Women and Politics
4.00 credits. Examination of the role of women in the political process. Topics include feminist theory, the development of the women's movement, participation of women in the political process as voters and elected officials, and public policy issues affecting women, including the feminization of poverty, reproductive rights and equality in the workforce.

370-378 Special Topics in Political Science
Variable credit. Topical areas and problems of political science, subjects chosen in accord with student demand. Credit variable based upon topics.

471 Capital Semester Internship
Variable credit. Applied field experience in politics and public administration for state or local government agencies, the state legislature and private political organizations. Normally, four credits are given to internships contracted for two regular office-hour days a week. Full-time internships receive eight hours of credit. **Prerequisites: PS 361, junior or senior status.* Register by Instructor.

480-489 Independent Study in Political Science
Variable credit. Designed to offer independent study to advanced students, making use of techniques of political science in specific problem areas not included in the department's regular offerings. **Prerequisites: approval of Department Chair and the Independent Study Committee.* Register by Instructor.

498 Senior Seminar in Political Science
4.00 credits. An integrative, capstone course in political science, in which significant controversies in political theory and practice will be discussed and analyzed. Course requirements include a major research project and the ETS Major Field Test in Political Science. **Prerequisite: senior status, or permission of the instructor.* Fall semester.

499 Senior Thesis
4.00 credits. An individualized study project involving research of a topic and the preparation and defense of a major paper or project in consultation with the student's honors advisor and the Department faculty. Completion of this course does not assure recognition for Honors in the Discipline. **Prerequisites: invitation to Honors in the Discipline Program and PS 498*. Spring semester. Register by Instructor.

Department of Psychology (B.A.)

Lemley (Chair), Dennis, Price, Rider, Roy, Smith, Teske

The Psychology Department offers preparation for careers in human services and education and preparation for graduate and professional training in clinical, experimental and applied psychology, and related fields. Students learn the principles and theories of psychology as currently understood and acquire the ability to derive new principles. Students are required to participate in topical and methodological studies, and may participate in field experience and research. All courses for the major include traditional learning in the classroom, as well as learning outside the classroom.

Major Offered

The Department offers a **Psychology major** and participates in the **Social Sciences Certification program**. For more information, see the Interdisciplinary Programs chapter of this Catalog.

Bachelor of Arts in Psychology

The **Psychology major** requires the following courses: Psychology 105, 213, 218 and 402; one of the following: 221, 225, 235 or 241; one of the following: 311, 321 or 341; any two of the following: 413, 414, 425 or 435; eight additional credits of psychology courses; one biology course and one philosophy course.

Minors Offered

A **Psychology minor** is offered in three tracks: **General Theory and Methods**, **Child Psychology**, and **Cognitive Neuroscience**.

General Theory and Methods Psychology minor track requires the following courses: Psychology 105, 213 and 12 additional credits of psychology courses, at least four of which are to be in upper division (300- or 400-level) courses. Students are encouraged to tailor their selection of courses to their personal and career goals in consultation with a member of the Psychology faculty.

Child Psychology minor track requires the following courses: Psychology 105, 225, 325, 333 and four additional credits of psychology courses.

Cognitive Neuroscience minor track requires the following courses: Psychology 105, 111, 213, 241, 311, and 341.

Honors in the Discipline

The Department of Psychology participates in the College Honors in the Discipline Program. For guidelines, students should consult the Department Chair.

Psychology Courses

105 SSC General Psychology
4.00 credits. **(Social Sciences Core Course)** An introduction to psychological science, including methods of inquiry, learning and motivation, abnormal behavior, developmental and social influences, cognition, sensation and perception, neuroscience and personality.

111 NPS Introduction to Neuroscience
4.00 credits. **(Natural and Physical Science Core Course)** A survey of the biological basis of psychological processes, including neurons and brain organization, the endocrine system, motor control, higher cortical functions and dysfunctions in order to provide an integrated understanding of the brain and behavior. Recovery from brain damage, sexual behavior, emotion, language, mood disorders, schizophrenia and additional related topics also are covered.

209 HUM Psyche and Film **WRI**
4.00 credits. **(Humanities Core Course)** Explores evolutionary and historical contributions to the concept of "psyche," as it develops in philosophical, moral and scientific understanding. It comes to include identity and character, inwardness, hiddenness, the external life of behavior and language, and the creative invention of self and world. In the contemporary era, this inheritance can be explored more fully via the medium of film, which may itself be transforming how we understand ourselves. *A *Writing and Research Intensive course.* Spring semester.

213 Research Methods and Statistics I
4.00 credits. Design and analysis of experimental research. Emphases include issues in philosophy of science, consideration of rival hypotheses, and research ethics. Hours: lecture 3, laboratory 2. **Prerequisite: PSY 105.* Fall semester.

218 Research Methods and Statistics II
4.00 credits. Design and analysis of correlational research. Emphases include measurement and statistical power, inferences of causality, and scientific writing. Hours: lecture 3, laboratory 2. **Prerequisite: PSY 213.* Spring semester.

221 Abnormal Psychology
4.00 credits. A study of mental disorders including schizophrenia, depression, substance abuse, anxiety and psychosexual disorders. Research and theories regarding diagnosis, causes and treatments are reviewed. **Prerequisite: PSY 105.* Spring semester.

225 Developmental Psychology
4.00 credits. Physical, perceptual, linguistic, intellectual and social-emotional human development, covering the periods of infancy, childhood, adolescence, adulthood and old age. Various options for the course project include off-campus observations of children and a developmental autobiography. **Prerequisite: PSY 105.* Fall semester.

235 Social Psychology
4.00 credits. Survey of issues, theories and methods in understanding the processes by which social life constitutes, influences and is composed of the thoughts, feelings and behavior of human beings. Topics include social explanation, social cognition and attribution, the dynamics of self, social influence, persuasion, aggression, innovation, interpersonal communication, relationships and environmental transaction. Students will conduct case studies and analysis. **Prerequisite: PSY 105.* Fall semester.

237 SSC Psychology of Women
4.00 credits. **(Social Sciences Core Course)** A psychological approach to understanding both the behavior of women and the female experience. Topics include development across the lifespan, language and reasoning, victimization, physical well-being, mental health and stereotypic-based conflicts.

241 Sensation and Perception
4.00 credits. This course investigates how we construct a conception of physical reality from sensory experience. Through lectures, in-class demonstrations and discussions, we will examine how environmental information gets to humans through our visual, auditory, cutaneous, olfactory and gustatory senses and how this information is interpreted by the brain so that we have a conscious experience of our environment. **Prerequisite: PSY 105 or 111.* Spring semester.

311 Neuropsychology
4.00 credits. An examination of the relationship between brain function and behavior in healthy and brain-damaged populations. Focuses on the manner in which various neural mechanisms are themselves interconnected and how they

connect with a variety of everyday or abnormal behaviors. The course will specifically address the use of particular neuropsychological tests in evaluating brain dysfunction. **Prerequisites: PSY 111 and junior status, or permission of instructor.*

321 Theories of Personality
4.00 credits. A critical examination of major theories and perspectives on human personality. Addresses historical and cultural issues, empirical evaluation, and the difficulties of formulating an integrated understanding. Emphasizes the pursuit of personal development, human freedom and clinical application. Theories include evolutionary, psychoanalytic, social-cognition, dispositional, motivational, ego-development and narrative. Includes studio work. **Prerequisites: PSY 105 and junior status, or permission of the instructor.* Spring semester.

325 Applied Developmental Psychology
4.00 credits. Examination of the applications of developmental theory and research. Topics covered include: influences of day care, poverty, child abuse, divorce, mass media and societal conflict on children's development; applications of cognitive research to education; assessment and intervention of developmental psychopathology; and aging and cognitive skills. Students participate in field work and analysis. **Prerequisite: PSY 225.* Spring semester.

333 Psychological Assessment
4.00 credits. An introduction to theoretical, practical and ethical issues in assessment, focusing on application and decision making. Widely-used tests are also discussed. **Prerequisite: PSY 105.* Spring semester.

341 Human Cognition
4.00 credits. A study of the theoretical models, methods and empirical findings involving mental abilities, including perceiving, reasoning, memory, problem solving, creativity, language and attention. **Prerequisites: PSY 105 and junior status, or permission of the instructor.*

370-378 Special Topics in Psychology
4.00 credits. Topics not part of the regular curriculum, offered based on student and faculty interest.

401 Counseling Psychology
3.00 credits. An introduction to counseling skills and an examination of the assumptions that students bring to the role of counselor. Substantial class time is devoted to role-playing various counselor/counselee situations. **Prerequisite: PSY 105.* Register by Instructor.

402 History and Systems of Psychology
4.00 credits. A study of major historical systems in psychology, including structuralism, functionalism, behaviorism, gestalt psychology and psychoanalysis.

Capstone course for Psychology majors. **Prerequisite: PSY 105 and senior status.* Fall semester.

413 Research in Perception
4.00 credits. A study of the theories and empirical findings in the area of perceptual functioning with emphasis on visual processing. Students will conduct an original research project. **Prerequisites: PSY 213, 218 and either PSY 241 or PSY 341.* Fall semester. Register by Instructor.

414 Research in Memory and Thinking
4.00 credits. The theories and empirical findings in memory and thinking. Students will conduct an original research project. **Prerequisites: PSY 213, 218 and 341.* Register by Instructor.

425 Research in Developmental Psychology
4.00 credits. An advanced study of major developmental theories and critical reviews of relevant empirical evidence. Students will conduct research projects related to a common theme in developmental psychology. **Prerequisites: PSY 213, 218 and 225.* Register by Instructor.

435 Research in Social Psychology
4.00 credits. A critical examination of selected areas of social psychological research with attention to crucial theoretical and methodological issues and questions of social, legal, ethical and historical relevance. Students will complete an original research project. **Prerequisites: PSY 213, 218 and either PSY 235 or PSY 321.* Register by Instructor.

475 Field Study
4.00 credits. Supervised training and experience in a professional setting related to psychology, generally for two afternoons a week, plus meetings with the instructor. Placement depends on student interest and goals and availability of professional setting. **Prerequisites: PSY 105 (PSY 221 and PSY 401 for students interested in a mental health setting).* Graded Pass/No Pass. Register by Instructor.

480-489 Independent Study in Psychology
Variable credit. Opportunity for students to engage in independent study. **Prerequisites: permission of the Department Chair and the Independent Study Committee.* Register by Instructor.

490 Research Practicum
Variable credit. Research in psychology under the close supervision of a faculty member. Topics for research are chosen in an area of interest to both persons. **Prerequisites: PSY 213, 218.* Register by Instructor.

Department of Religious Studies (B.A.)

J. Long (Chair), Bach, Bucher, Fitz, Kraybill, M. Long, Sadd, Simes

Religious Studies courses offer all students the opportunity to explore the religious and spiritual dimensions of life, culture and society. The Department prepares its majors and minors to continue theological study and ministry training at the graduate level, to pursue graduate study in religion, and to make meaningful contributions in the vocations to which they feel called. In keeping with the heritage of the Church of the Brethren and the mission of the College, Departmental courses explore ways in which religious beliefs, practices and traditions promote peace within the human community; commend the use of nonviolent methods of transforming conflict; establish justice locally and globally; proclaim the essential worth of all human beings; and encourage respect for diversity.

Religious Studies is a highly diversified discipline that draws on a variety of scholarly methods and involves the empathetic study of myriad religious traditions. Our Department reflects the historical, theological, scriptural, ethical and comparative aspects of this field. The faculty is, therefore, able to offer a balanced and thorough course of study for students in the areas of Asian religions, biblical studies, ethics and society, history of Christianity, and ministry studies.

Following the Church of the Brethren heritage of Elizabethtown College, the Department emphasizes the study of nonviolence and fosters an understanding of the historical Brethren commitments to peace, justice and service. Thus, the Department sponsors interdisciplinary minors in Peace and Conflict Studies and Anabaptist and Pietist Studies (see the Interdisciplinary chapter of this Catalog).

Majors Offered

The Department offers a major in Religious Studies with the option of tailoring the major with one of five concentrations.

Bachelor of Arts in Religious Studies

The **Religious Studies major** consists of 12 courses. Students are encouraged to design a program of study that has both breadth and depth. To gain depth in one area of religious studies, majors should choose one of the following areas of concentration: **Biblical Studies**, **Ethics and Society**, **History of Christianity**, **Asian Religions** or **Ministry Studies**.

Majors who concentrate in Biblical Studies, Ethics and Society, History of Christianity, or Asian Religions should complete within their concentration the

following courses: at least one 200-level course; at least two 300-level or 400-level courses; and Religious Studies 490, a research project or thesis in their concentration. To gain breadth, **majors normally will take at least two courses in areas outside their concentration.** Choose from the following concentrations:

Biblical Studies concentration: Religious Studies 213, 214, 215, 216, 225, 226, 261, 313, 323, 325.

Ethics and Society concentration: Peace and Conflict Studies 165, Religious Studies 261, 264, 344, 345.

History of Christianity concentration: Religious Studies 284, 285, 289, 385.

Asian Religions concentration: Religious Studies 217, 218, 291, 292, 391, 392, 393.

The Ministry Studies concentration: Students who concentrate in Ministry Studies should take Religious Studies 252; 355; either 470 (Internship) or 490 (Research Project); and they must choose one course from each of the following areas: Bible (225 or 226); Ethics and Society (Religious Studies 145 or Peace and Conflict Studies 165); History of Christianity (284, 285 or 289); and World Religions (Religious Studies 105, 291 or 292).

Language Requirement. All Religious Studies majors should take two college-level courses in a second language, either an ancient language (e.g., Greek, Hebrew, Latin or Sanskrit) or a modern language (e.g., French, German, Japanese or Spanish). Religious Studies majors also are encouraged to incorporate study-abroad into their academic program as a junior-year experience or as a summer experience.

Double Majors. Students who have chosen Religious Studies as a second major may petition the Department for a two-course reduction in the major requirements.

Electives. In addition to courses from within the Department to complete their major in Religious Studies, students may choose to take a maximum of two courses from these offerings in other Departments: History 311, 312, 315; Philosophy 201, 320; Political Science 328; and Sociology 317.

Minors Offered

The **Religious Studies minor** consists of six courses from the Religious Studies Department (i.e., courses with a Religion prefix). Religious Studies minors are encouraged to see a member of the Department for advising.

Minors in **Peace and Conflict Studies** and **Anabaptist and Pietist Studies** also are available. Consult the Interdisciplinary Programs chapter of this Catalog for details about these minors.

Honors in the Discipline

The Department of Religious Studies participates in the College Honors in the Discipline Program. For guidelines, students should consult the Department Chair.

Religious Studies Courses

105 HUM Exploring Religion and Religions
4.00 credits. **(Humanities Core Course)** A survey introducing historical origins, practices and beliefs of many of the world's religious traditions and the methods of inquiry in the various disciplines in the field of religious studies. Theories of the nature and origin of religion, and categories such as the sacred, myth, scripture, ritual, ethics, religious change and questions of religious truth are explored. Significant attention to the contemporary environment of religion is granted.

145 HUM Jesus and Moral Life
4.00 credits. **(Humanities Area of Core)**. This survey course explores the moral vision of Jesus and introduces Christian ethical reflections on social institutions (for example, the state and market) and social actions (for example, peacemaking and distributing capital). A fundamental part of this course is an exploration of the sources, types and contexts of Christian social ethics.

213 PLO Biblical Hebrew I
4.00 credits. **(Power of Language Core Course)** A beginning study of the alphabet, grammar and vocabulary of Biblical Hebrew, with the final goal of reading the Tanakh in its original language. Offered as needed.

214 Biblical Hebrew II
4.00 credits. Continues the study of Biblical Hebrew grammar and vocabulary.
**Prerequisite: REL 213, or permission of the instructor.*

215 PLO Koiné Greek I
4.00 credit. **(Power of Language Core Course)** A beginning study of the alphabet, grammar and vocabulary of New Testament Greek, designed to develop basic reading competence and an understanding of some of the challenges one faces when translating the New Testament into English.

216 Koiné Greek II
4.00 credits. Continued study of Koine Greek grammar and vocabulary.

Translation exercises are taken from the Septuagint and the New Testament. Offered as needed. **Prerequisite: REL 215, or permission of instructor.*

217 PLO Sanskrit I
4.00 credits. **(Power of Language Core Course)** This course is an introduction to Sanskrit, designed to develop basic reading competence as well as a general knowledge of grammatical principles, an elementary vocabulary, and a sense of the relationship of the structure of the Sanskrit language to classical Indian culture and philosophy. Offered as needed.

218 Sanskrit II
4.00 credits. This course is a continuation of Sanskrit I, designed to further develop and enhance basic reading competence and to broaden general knowledge of grammatical principles, an elementary vocabulary, and a sense of the relationship of the structure of the Sanskrit language to classical Indian culture and philosophy. Offered as needed. **Prerequisite: REL 217.*

225 NCH The Hebrew Bible and Ancient Near East WRI
4.00 credits. **(Non-Western Cultural Heritage Core Course)** An introduction to the Hebrew Bible with emphasis on its ancient Near Eastern context. Readings will include myths, stories, laws, hymns, poetry and wisdom texts from Egypt, Babylonia and Ugarit, in addition to selected readings from the Bible (Tanakh or Old Testament). **A Writing and Research Intensive Course.*

226 WCH The New Testament WRI
4.00 credits. **(Western Cultural Heritage Core Course)** An introduction to the literature of the New Testament, with emphasis on the first-century Mediterranean context. Spring semester. **A Writing and Research Intensive course.*

252 Vocation and Church in the 21st Century
4.00 credits. This course invites students to reflect theologically on vocation and the church within the context of the changing landscape of the postmodern world. Emphasis will be placed on the trends and issues that challenge the church in the 21st century. While the course and its readings will focus primarily on the Christian church in the United States, the course also will discuss trends, issues, and methods that may apply to synagogue, temple or mosque. Alternate years.

261 Peacemaking and Social Justice in the Bible
4.00 credits. An examination of biblical texts relating to peacemaking and social justice and the ways in which those texts have been interpreted by Christian ethicists and theologians. Every four years.

264 Religion and Violence
4.00 credits. Through an exploration of a variety of religious traditions and

historical case studies, this course engages in a cross-cultural, multidisciplinary examination of the role of religion in promoting both violence and nonviolence. Topics include religiously motivated terrorism, religious responses to globalization and secularism, religion and the politics of identity, and religious views on the ethical treatment of animals and the environment. Alternate years.

284 Anabaptist and Pietist Movements
4.00 credits. An introduction to the major events, personalities, beliefs and cultural life of representative Anabaptist and Pietist movements. Primary focus will be given to the European origins and immigration to America of the Mennonites, Amish, Brethren and Moravians. Special attention will be given to the background of these movements in the Protestant Reformation, and their place within the wider Believer's Church, or Free Church, wing of European and American religious life. Fall semester.

H285 HNR WCH Amish, Brethren, and Mennonites WRI
4.00 credits. **(Western Cultural Heritage Core Course – Honors)** An interdisciplinary study of the Amish, Brethren and Mennonite experience (beliefs, history and practices) in the context of modern American culture with primary focus upon understanding how these religious communities responded to major developments in American society since 1850 – the industrial revolution, the modern state, individuation, modern warfare, conscription, the rise of technology, compulsory public education, theological liberalism and religious pluralism. How changes in the larger society have encouraged assimilation, fragmentation, and, in some cases, reactionary (old order) movements within Anabaptist and Pietist groups is explored. **A Writing and Research Intensive course.* Spring semesters. Register by Instructor.

291 NCH Hinduism WRI
4.00 credits. **(Non-Western Cultural Heritage Core Course)** An introduction to the Hindu tradition and the traditions that have emerged from it – Jainism, Buddhism and Sikhism – as well as its historical interactions with Islam, Zoroastrianism and Christianity. Basic Hindu concepts and practices are introduced and the history of the tradition is explored from the ancient Harappan civilization to modern times. **A Writing and Research Intensive course.*

292 NCH Buddhism WRI
4.00 credits. **(Non-Western Cultural Heritage Core Course)** An introduction to the Buddhist tradition in all of its various forms – Theravada, Mahayana and Vajrayana – and its interactions with Confucianism, Taoism and Shinto. Basic Buddhist concepts and practices are introduced and the history of the tradition is explored from the life of the Buddha to modern times. Issues range from the paranormal (karma, reincarnation and the nature of the Buddha) to the political with strong emphasis on Buddhist philosophy. **A Writing and Research Intensive course.*

293 Islam
4.00 credits. An introduction to the teachings, practices and history of Islam. Alternate years.

313 Intermediate Biblical Hebrew
Variable credit. This course is designed to develop students' ability to read and translate Biblical Hebrew. The class meets weekly to read, translate and discuss a short passage from the Bible. Students will prepare the passage in advance of the session. Students may choose to take this course for one to four credits, with there being one hour of class time for every credit earned. Assignments will be determined based on the number of credits chosen. The course may be repeated for a maximum of eight credits. Offered as needed.

323 Women, Gender, and the Hebrew Bible
4.00 credits. An upper-level seminar in biblical studies offering advanced study of selected Hebrew Bible texts that reflect attitudes about women, sexuality and gender. Readings will include selections from both the Hebrew Bible and related secondary literature. Emphasis is on the study of women and gender in the Hebrew Bible, and students will read primarily feminist scholarship. Some attention is given to gender from the perspective of the more recent fields of gender studies and men's studies. **Prerequisite: REL 211 or 225.* Alternate years.

325 Seminar in Biblical Studies
4.00 credits. Advanced work in the field of biblical studies. Changing topics. Possible topics include Wisdom Literature; Prophecy and Apocalyptic; Book of Genesis; Jesus and the Gospels; The Apostle Paul. **Prerequisite: REL 225 for seminars in Hebrew Bible; REL 226 for seminars in New Testament.* Every four years.

344 Social Ethics of Martin Luther King
4.00 credits. An introduction to the social ethics of Martin Luther King Jr., the course explores the sources, substantive content and evolution of King's reflections on social institutions (the state and market), social actions (peacemaking and redistributing resources), social roles (prophet and politician), and moral character. King's social ethics in relationship to his theological beliefs and personal practices are examined. **Prerequisite: REL 245.* Every four years.

345 Seminar in Christian Social Ethics
4.00 credits. Upper-level seminar, designed especially for students with a concentrated interest in theology and ethics, offers an advanced study of major issues and figures in Christian social ethics. Sections include Christianity and politics, Christian liberation ethics, and Christian attitudes towards war and peace. The seminar, led in part by students, is devoted to careful exegeses of, and writing about, the primary texts of major Christian ethicists. **Prerequisite: REL 245, or permission of the instructor.* Every three years.

352 Psychology of Religion
4.00 credits. An examination of the classic issues in the psychology of religion. Readings in William James, Peter Berger, Carl Jung and Sigmund Freud. Alternate years.

355 Seminar in Ministry Studies
4.00 credits. An in-depth examination of specialized topics and issues in the area of ministry studies. Theoretical models, contemporary issues and practical applications in specific ministry contexts are emphasized. Topics vary, so the course may be repeated under new topics. Sections may include Servant Leadership, Spiritual Formation, Ministry with Children and Youth, and Women in Ministry. **Prerequisite: REL 252, or permission of the instructor.*

364 Amish Society (SO 364)
4.00 credits. The history, culture and social organization of the Old Order Amish. Sociological theories and models utilized by social scientists to describe and analyze the Amish will be presented. Special attention will be paid to recent social changes among the Amish.

370-378 Special Topics in Religious Studies
4.00 credits. Topics not included in the regular curriculum. Offered as needed. Register by Instructor.

385 Seminar in History of Christianity
4.00 credits. Offers advanced work in the History of Christianity. Topics include "Brethren Life and Thought." Offered as needed.

391 Hinduism and Modernity
4.00 credits. An in-depth exploration, building on the foundation established in Religious Studies 291, of issues facing contemporary Hinduism. This course covers the British colonization of India; the Bengal Renaissance; Hindu reform movements; the life and teachings of such figures as Sri Ramakrishna, Swami Vivekananda, Mahatma Gandhi and Sri Aurobindo; Hinduism and science; and Hindu nationalism in the late 20th and early 21st centuries. Particular attention will be paid to issues arising from the spread of Hinduism beyond the subcontinent, especially in the West, and the impact of Hinduism upon Western culture, from the transcendentalists to the theosophists to the Beatles. **Prerequisite: REL 291.*

392 Religion in China and Japan
4.00 credits. An in-depth exploration, building on the foundation established in Religious Studies 292, of the religious traditions of China and Japan: Daoism, Confucianism, Shinto, and Chinese and Japanese forms of Buddhism. Readings will be drawn mainly from primary sources in English translation, such as the Daodejing, the Chuang-tzu, the Analects of Confucius, the Kojiki, and the

Shobogenzo of Dogen, as well as writings by modern Zen masters and scholars such as D.T. Suzuki and Alan Watts. **Prerequisite: REL 292.*

393 Indian Philosophy
4.00 credits. An in-depth exploration of classical Indian philosophy: Hindu, Buddhist and Jain. Readings will be drawn mainly from primary sources in English translation, such as the Upanishads, the Tripitaka, the Bhagavad-Gita and the Tattvartha Sutra, and the writings of such central figures of the Indic philosophical tradition as Nagarjuna, Vasubandhu, Shankara, Ramanuja and Haribhadrasuri. **Prerequisite: REL 291 or 292.*

471 Internship in Religious Studies
Variable (3.00 to 15.00) credits. Students spend one full day a week working in a church, nonprofit institution or research organization with religious-based interests in return for three academic hours of credit. Internships are primarily unpaid experiences, but some organizations may offer a stipend or form of payment. Course requirements are decreased or increased as deemed appropriate by the Internship Advisor. Register by Instructor.

480-489 Independent Study in Religious Studies
Variable credit. Individual study in areas of interest for students capable of conducting independent research. **Prerequisites: approval of the Department Chair and the Independent Study Committee.* Register by Instructor.

490 Senior Research
4.00 credits. A specialized independent study in the student's senior year. Required of students concentrating in Asian Religions, Biblical Studies, Ethics and Society, and History of Christianity, optional for Ministry Studies students. For Honors Students majoring in Religious Studies, this is their Honors Thesis. Students invited to undertake Honors in the Discipline research take this course. Register by Instructor.

Department of Social Work (B.A.)

McFarland (Chair), Ayinagadda, Bartoli, Bergel, Mapp

The mission of the Elizabethtown College Social Work Program is to prepare competent and committed social workers who have integrated social work knowledge, values and skills, and who work for social and economic justice locally, nationally and globally. Consistent with the Elizabethtown College motto, "Educate for Service," we strive to provide a generalist social work education that is based upon a strong liberal arts foundation integrated with extensive field experience.

The program is accredited by the Council on Social Work Education and has established the following goals:

Goal One: To develop competent and committed social workers grounded in a liberal arts perspective and a professional foundation, who can work with multi-level systems in serving diverse and oppressed populations.

Goal Two: To develop competent, entry-level generalist social workers whose practice is guided by social work knowledge, professional values and ethical standards of behavior.

Goal Three: To develop social workers who, recognizing the strengths inherent in human diversity, advocate for social and economic justice and to empower clients within a global context.

The program provides an extensive opportunity for field experience beginning in the first year. The major culminates with 600 hours of field instruction during the student's senior year. Field experiences are arranged to meet the student's individual interest. Field experiences include but are not limited to such areas as child welfare, corrections, mental health, rehabilitation, health care, schools and aging.

Major Offered

Bachelor of Arts in Social Work

Prospective Social Work majors must apply for admission to the program in the spring semester of their second year. This application requires the following:

A formal interview with a Social Work faculty member, during which professional interests and abilities are explored.

Two reference rating forms completed by persons who know the applicant (one personal, one professional).

A short essay describing the applicant's interest in the field of social work.

A 2.00 cumulative grade point average.

Admittance into the program does not guarantee that the student will graduate with a degree in Social Work. The advisor – in conjunction with the Social Work faculty – reserves the right to dismiss a student from the major on the basis of unprofessional behavior and/or academic performance. The standards for professional conduct as expressed in the National Association of Social Workers Code of Ethics serve as the Department's standards for determining dismissal from the program. The student has the right to appeal the decision in the same

manner as dismissal for academically related reasons. These policies are articulated in both the Department handbook and on the website.

In order to remain in the Department, the student must obtain a minimum grade point average of 2.00 in all social work courses required by the major.

The **Social Work major** requires the following courses: Biology 101 or 111; Sociology 101; Psychology 105; Mathematics 251; Social Work 160, 233, 280, 330, 367, 368, 369, 401, 470, 471 and 498.

Minor Offered

The Department of Social Work offers an Interdisciplinary minor in **Human Services**, which is described in the Interdisciplinary Programs chapter of this Catalog. For more information, contact Dr. Vivian Bergel.

Honors in the Discipline

The Department of Social Work participates in the College Honors in the Discipline Program. For guidelines, students should consult the Department Chair.

Social Work Courses

160 SSC Social Problems and Response of Social Welfare Institutions
4.00 credits. **(Social Sciences Core Course)** An orientation to the sociological and social work approaches of examining social problems and the development of social welfare policies and programs to reduce their severity and extent. Developing an understanding of both sociological and social work theories and the way in which these theories form the foundation for research, service and advocacy is emphasized. Fifteen (15) hours of service-learning and original social research are required.

233 Human Behavior in the Social Environment
4.00 credits. This course provides a study of the interrelationships of social systems, with particular emphasis upon the impact of the environment on human development throughout the life span. Special consideration is given to the influence of ethnicity, racism, sexism and ageism upon human behavior. Fifteen (15) hours of service-learning is required. **Prerequisites: PSY 105, SO 101 and BIO 105, 110 or 111.*

260 SSC International Social Development **WRI**
4.00 credits. **(Social Sciences Core Course)** The impact of the history, traditions and beliefs of different non-Western cultures on the development of social issues will be examined. The history of the problem, its context and development within the culture and attempts at resolution will be explored. Students will be able to

understand why common issues assume different forms in different cultures. **A Writing and Research Intensive Course.*

280 Interpersonal Counseling in a Multicultural Context
4.00 credits. Theories explaining human behavior and social interaction in the context of social systems and social welfare are discussed, analyzed and critically reviewed. Students learn to appreciate their own cultural heritage and how it has shaped them; and about the cultural heritage of other diverse groups, about the need for equality, and social and economic justice for all oppressed people, and effective interpersonal and multicultural counseling. Fifteen (15) hours of service-learning in a diverse setting is required.

330 Methods of Social Work Research
4.00 credits. A focus upon the basic elements of the scientific method providing an overview of research designs commonly used in social sciences, including techniques for gathering, analyzing and presenting data. **Prerequisite or corequisite: MA 251 and prerequisites: SW 160, 233, or permission of the instructor.* Fall semester.

332 Seminar in Urban Issues
4.00 credits. An exploration of some of the complex and interconnected education, health and welfare issues affecting low-income urban families, schools and communities. Service-learning and action research in urban schools, agencies and community programs provide experiential learning vital to a deeper understanding of educational, political, racial and economic dynamics that shape and constrain the lives of families in U.S. cities. Fifteen (15) hours of service-learning in an urban setting is required. **Prerequisite: previous experience in urban communities, schools or agencies.*

339 Human Sexuality
4.00 credits. This course focuses on the socio-historical aspects of sexuality, survey and experimental research, and attitudes towards sexuality.

344 Aging: Social Response and Implications
4.00 credits. An examination of the aging process in our society. The emphasis is on the interface of the individual and the environment and the services, needs and institutions related to the elderly. Field trips to community agencies and 10 service-learning hours required.

345 Irish Perspective on Issues of Social Welfare & Education
3.00 credits. This course is comprised of a 14-day international trip to the Republic of Ireland and Northern Ireland. Students will gain an understanding of: cultural differences; history; politics; educational systems and social service delivery network in Ireland through this international experience. This course emphasizes service-learning and reflection. The course is open to all majors upon approval of the instructor. Register by Instructor.

355 Women in Society
4.00 credits. This course is designed to provide a systemic view of women in our society. The emphasis will include the socialization of women, women's roles historically and in our major social institutions, sexism and the feminist movement. Feminist social work practice and its connection to feminist ideology theory will be explored.

357 Child Welfare
4.00 credits. A study of ethnic, cultural and economic problems as they relate to children, the services available to combat those problems, and the legal and legislative aspects of child welfare.

366 Addiction and Society
4.00 credits. An examination of individual, family and social implications of addiction in society and an exploration of social policies related to addiction.

367 Generalist SW Practice I: Individuals
4.00 credits. A focus on problem solving in generalist practice at the micro level (i.e., individuals) with diverse populations. A variety of interventions, assessment techniques and theories are studied in preparation for a required 40-hour supervised field experience. **Prerequisites: SW 160, 223, or permission of the instructor, and Social Work majors only.* Fall semester.

368 Generalist SW Practice II: Families and Small Groups
4.00 credits. A study of the knowledge, values and skills that comprise the generalist base of social work practice. It is designed to assist students in developing basic entry-level social work competencies to work with groups and families from a systems perspective. A 40-hour supervised field experience is required. **Prerequisite: SW 367, or permission of the instructor; corequisite: SW 369; and Social Work majors only.*

369 Generalist SW Practice III: Communities and Organizations
4.00 credits. Theory and skills development for macro generalist social work practice are presented. Promoting the social welfare of communities and organizations by enhancing social and economic justice is stressed. **Prerequisite: SW 330, or permission of the instructor; corequisite: SW 368; and Social Work majors only.*
Spring semester.

370-378 Special Topics in Social Work
Variable credit. Topical areas in social work, chosen in accord with student and faculty interest.

400 Senior Project in Social Work
Variable (2.00 or 4.00) credits. Students who have been invited to and accepted to participate in the Honors in the Discipline Program may register for this course in

the semester in which the research or creative project is completed. Completion of this course does not assure recognition for Honors in the Discipline. **Prerequisite: invitation to Honors in the Discipline program.* Register by Instructor.

401 Social Policy
4.00 credits. Students build their knowledge of social welfare and social work's historical and philosophical foundation. They learn why and how social policy is formulated and implemented; how policy impacts direct practice; and frameworks for policy analysis. **Prerequisites: SW 330, 367 or permission of the instructor, and Social Work majors only.* Spring semester.

470 Field Instruction I
6.00 credits. Supervised field instruction for at least 200 hours in an agency. Student begins to assume responsibility with client systems in such ways as monitoring tasks, providing support, conducting group activities, and assisting the social worker with other professional responsibilities. **Prerequisites: SW 401 or permission of the instructor, and Social Work majors only.* Graded Pass/No Pass. Fall semester.

471 Field Instruction II
12.00 credits. Supervised field instruction for at least 400 hours plus a weekly on-campus seminar. Students proceed from an "assistant" position to one of complete client responsibility under direct supervision. Roles students assume may include advocate, enabler, social broker and program planner. **Prerequisites: SW 470 or permission of the instructor, and Social Work majors only. *Corequisite: SW 498.* Graded Pass/No Pass. Spring semester.

480-489 Independent Study in Social Work
Variable (2.00 to 4.00) credits. Opportunity for advanced students independently to pursue study otherwise not available in the curriculum. **Prerequisites: permission of the Department Chair and approval of the Independent Study Committee.* Register by Instructor.

498 Senior Seminar in Social Work
4.00 credits. Final course integrating the theory from preceding courses with the professional experience of field instruction. A major project is required. **Corequisite SW 471, or permission of the instructor, and Social Work majors only.* Spring semester.

Department of Sociology and Anthropology (B.A.)

Newell (Chair), Field, Kanagy, Kozimor-King, Kraybill, T. Long, Wheelersburg

The Department's program provides for the study of interpersonal and inter-group relationships and the growth, changes, structures and processes of human society. The courses – reflecting the philosophical tradition of Elizabethtown College – are designed to prepare students for service and leadership in a complex society.

Majors Offered

Bachelor of Arts in Sociology-Anthropology

The **Sociology-Anthropology major** emphasizes conceptual and applied approaches so that the student is prepared for a variety of career opportunities. Students majoring in Sociology-Anthropology move directly into careers in business, government, criminal justice, survey and marketing research, religious settings, and in other fields where knowledge of society and human behavior is important. Some go on to graduate school seeking higher degrees in sociology, anthropology, public health, hospital administration, social planning, social work, law and business administration.

The Sociology-Anthropology major requires 44 credits. Students complete 32 credits from the common track and 12 credits from one of three concentrations. The common track requires Sociology 101, 330, 331, 402; Anthropology 111, 201; one of the following: Anthropology 306, 307, 308 or Sociology 364; and Mathematics 251.

The **Sociology-Anthropology concentration** includes a sociology elective, an anthropology elective and an internship.

The **Criminal Justice concentration** requires Sociology 216 and 218; Sociology 342 or 352, or Political Science 303 or 304; and an internship.

The **Archaeology concentration** consists of Anthropology 361, 362 (field school) and 363.

Bachelor of Arts in Criminal Justice

With a focus on social justice, the **Criminal Justice major** emphasizes the prevention aspects of the criminal justice system. Students learn basic social science theories on the sources of conflict in America, such as race and ethnic relations and deviant behavior. Majors also acquire the analytical tools and criminal justice knowledge necessary to collect and interpret crime data. As

liberal arts majors, students broaden their learning outside of sociology in such fields as ethics, political science, psychology and statistics. In addition, Criminal Justice majors elect subjects relevant to modern criminology, such as management, foreign language, human genetics, law, professional writing or social work.

The Criminal Justice major consists of 40 required credits and eight credits of approved electives. Required courses are Sociology 101, 216 or 218, 330, 342 or 352, 353, 402 and 471; Mathematics 251; Philosophy 115; and Psychology 105. Students must choose two courses from the following groups, and only one course from any one group can be used to meet the elective requirement: Anthropology 363 or Biology 211; English 283 or 284; Political Science 303, 304 or 361; Psychology 221 or 235; Spanish 211 or 212; and Social Work 357 or 366.

The Department also participates in the **Social Studies certification program** that prepares students to be secondary teachers. Refer to the Interdisciplinary chapter of this Catalog for a detailed description.

Minors Offered

The **Anthropology minor** requires 16 credits of course work, including: Anthropology 111, 201 and two anthropology electives.

The **Sociology minor** requires 16 credits of course work, including: Sociology 101, 330 and two sociology electives.

Honors in the Discipline

The Department of Sociology-Anthropology participates in the College Honors in the Discipline Program. For guidelines, the student should consult the Department Chair.

Sociology Courses

101 SSC Discovering Society
4.00 credits. **(Social Sciences Core Course)** An introduction to the sociological perspective to achieve an understanding of society and its impact on the individual through exploring social reality, processes and explanation.

204 SSC Population and Global Issues
4.00 credits. **(Social Sciences Core Course)** Critical analysis of the relationship between demographic processes (including fertility, mortality and migration) and major social problems (such as land degradation, food and water shortages, energy development and sustainable growth).

216 Introduction to the American Criminal Justice System
4.00 credits. An overview of the criminal justice system in the United States that examines law, policing, lawyers, judges and court processes.

218 Criminology
4.00 credits. Sociological approaches to the study of crime with emphasis on current sociological theory and research, special consideration of the judicial system and penology.

220 Race and Ethnic Relations
4.00 credits. Study of racial and cultural minorities in the United States and their relationships to dominant groups, including discrimination, prejudice, racial myths, and methods of reducing intergroup tensions.

301 Social Issues
4.00 credits. A survey of major social problems, including alienation, addiction, crime and poverty. Implications for public policy are stressed.

305 Marriage and Family
4.00 credits. A study of cross-cultural marriage and family patterns and the comparison of these frameworks to premarital, marital, postmarital and nonmarital aspects of family life in our society.

317 Sociology of Religion
4.00 credits. An analysis of the role and function of religion and religious institutions in society. A study of religion as a social and cultural system. **Students who have taken REL 317 may not take this course.*

330 Methods of Social Research
4.00 credits. Basic procedures of sociological research design, sampling, measurement and data analysis. **Prerequisite: SO 101.* Fall semester.

331 Social Statistics
4.00 credits. Basic introduction to the study of statistical techniques of social research and analysis with emphasis on reasoning with data. **Prerequisites: SO 330, MA 251.* Spring semester.

342 Modern Corrections
4.00 credits. Overview of the origins, processes, organization and contemporary trends of corrections for juveniles and adults, including problems and alternatives to current correctional policies.

352 Juvenile Law and Justice
4.00 credits. An analysis of young offenders focusing on delinquency theory, juvenile law, and components and processes of the juvenile justice system.

353 Policing in America
4.00 credits. Examines the structure of policing and police behavior in America, including the roles of police officers, decision-making strategies, community relations, and problems with policing.

364 Amish Society (REL 364)
4.00 credits. An introduction to the history, culture and social organization of the Old Order Amish. Sociological theories and models utilized by social scientists to describe and analyze the Amish will be presented. Special attention will be paid to recent social changes.

370-378 Special Topics in Sociology
4.00 credits. Occasional course offerings used to enhance the Department curriculum.

402 Sociological Theory
4.00 credits. Examination and analysis of the development of the major classical and contemporary sociological theories with an emphasis on examining key concepts and how these have been applied in sociological research. **Prerequisites: senior status; majors only.* Spring semester. Register by Instructor.

471 Sociology Internship
Variable (4.00 to 8.00) credits. Applied field instruction in a subfield of sociology chosen to meet the needs of the student. Graded Pass/No Pass. **Prerequisite: permission of Internship Supervisor.* Register by Instructor.

480-489 Independent Study in Sociology
Variable credit. Offers advanced students the opportunity for independent study in areas not included in the regular offerings within the Department. **Prerequisites: approval of the Department Chair and Independent Study Committee.* Register by Instructor.

Anthropology Courses

111 NCH Understanding Human Cultures
4.00 credits. **(Non-Western Cultural Heritage Core Course)** An exploratory survey of the peoples and cultures of the world with special emphasis upon four interrelated cultural systems: economy, technology, social organization and ideology.

201 NPS Principles of Biological Anthropology
4.00 credits. **(Natural and Physical Science Core Course)** Introductory examination of humans and their biological history within the scientific framework of evolution by natural selection. The study of genetics, modern primates, the human fossil record and early cultural attainments provides a context in which to understand our place in the continuum of nature. **Prerequisites: one 100-level Natural and Physical Sciences Core course with a laboratory.*

306 Indians of North America
4.00 credits. A selective survey of Native American groups, past and present, with particular attention given to their historical background, modern life-style development, and contemporary social problems.

307 Ethnography of Africa
4.00 credits. Ethnographic and cultural analysis of the folk background and contemporary customs of the peoples of sub-Saharan Africa, with special attention to the problems of culture change.

308 Ethnography of Latin America
4.00 credits. Ethnographic and historical examination of the present cultures in Latin America, with emphasis on the issues of ethnicity, religion, family and gender relations, social structure, economics and urban development.

361 Archeology and Geography
4.00 credits. Methods of historical archaeology and cultural geography are covered, including field survey and documentary analysis, including diaries, letters, government records and maps.

362 Archeology Field School
Variable (2.00 to 6.00) credits. Field instruction in excavating techniques, record keeping, mapping, artifact identification, processing, cataloging and classification. Sites vary but focus on historical sites in Pennsylvania.

363 Forensic Anthropology
4.00 credits. Analysis of human skeletal anatomy from the medico-legal perspective, emphasizing recovery, bone identification, and determination of sex, stature and age of an individual. Register by Instructor.

370-378 Special Topics in Anthropology
4.00 credits. Occasional course offerings used to enhance the Department curriculum.

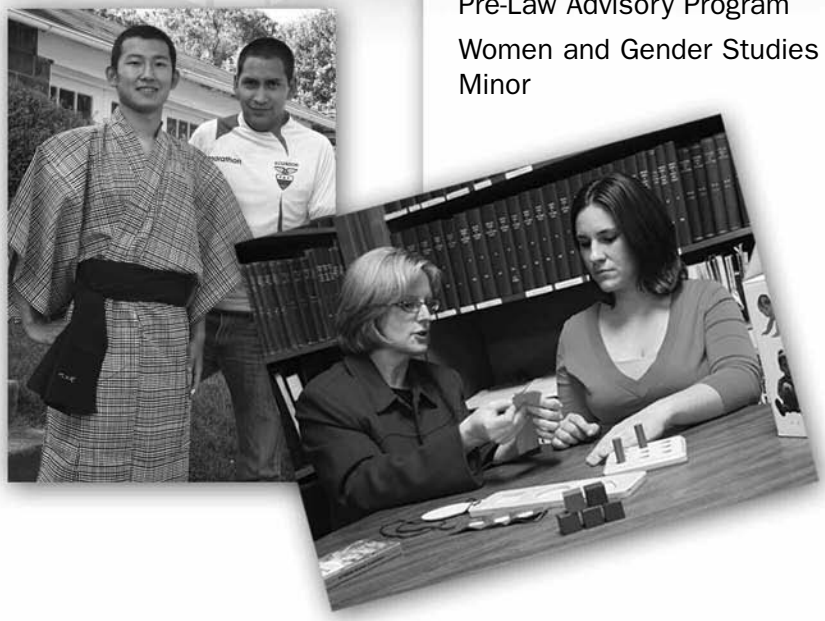
471 Anthropology Internship
Variable (4.00 to 8.00) credits. Applied field instruction in a subfield of

anthropology chosen to meet the needs of the student. Graded Pass/No Pass. Register by Instructor.

480-489 Independent Study in Anthropology
Variable credit. Offers to advanced students the opportunity for independent study in areas not included in the regular offerings within the Department. **Prerequisite: approval of Independent Study Committee.* Register by Instructor.

Interdisciplinary Programs

- Anabaptist and Pietist Studies Minor
- Asian Studies Minor
- Certification Programs
- Creative Writing Minor
- Forestry/Environmental Management Major
- General Science Minor
- Human Services Minor
- International Studies Minor
- Peace and Conflict Studies Minor
- Political Philosophy and Legal Studies Major
- Pre-Law Advisory Program
- Women and Gender Studies Minor



Interdisciplinary Programs

Anabaptist and Pietist Studies Minor

The interdisciplinary minor in **Anabaptist and Pietist Studies** consists of 24 credits. The required introductory course, Anabaptist and Pietist Movements, is designed to orient students to the European historical and theological roots of these religious traditions. The elective courses enable students to shape a personal program of emphasis that draws on the resources of three academic disciplines: religion, history and sociology. The requirements for an Anabaptist and Pietist Studies minor are:

Required introductory course: (1 course, 4 credits) Religious Studies 284.

Elective courses: (5 courses, 20 credits) from the following list: Religious Studies 165, 226, 280, 285, 289; Sociology 317, 364; and History 315.

For further information, contact the Department of Religious Studies or the Young Center.

Asian Studies Minor

An **Asian Studies minor** offers students an opportunity for cohesive study of Asia. The interdisciplinary program allows students to advance their study of Asian history, culture, language and society and can serve as preparation for a variety of careers and graduate school options. The requirements for an Asian Studies minor are:

Foundations course: (1 course, 4 credits) History 112.

Asian language courses: (2 courses, 8 credits) Two semesters of one Asian language (currently Japanese or Sanskrit).

Elective courses: (3 courses in two different disciplines, 12 credits) from the following list: History 224, 225 or 490; Japanese 345 or 495; Religious Studies 291, 292, 391, 392, 393 or 490; up to two semesters of a second Asian language; up to eight credit hours from appropriate courses taken as part of a study-abroad program in an Asian country including, but not limited to, the Dalian Institute of Foreign Languages in China, Hokusei Gakuen University in Japan, and Nihon University in Japan.

Certification Programs

The College offers several interdisciplinary programs leading to Pennsylvania teacher certification. For additional information on these programs, contact the Chair of the Education Department.

Social Studies Certification

Students pursuing a **Social Studies certification** acquire a mastery of the various subject fields that are part of a secondary social studies curriculum. In addition, the program provides training in the techniques of teaching, along with actual teaching experience in a social studies classroom. Upon successful completion of the program, students are certified to teach social studies in secondary schools in Pennsylvania and, by reciprocal agreement, in several other states.

Requirements for Social Studies certification include: History 115, 201, 202; one additional European history course; one non-United States, non-European history course; Political Science 111 and 150; Economics 101; Anthropology 111; Sociology 101; Psychology 105; one of the following: Anthropology 306, 308, 361 or Earth Science 216; one elective in history, political science or economics; and one elective in Anthropology, Sociology or Psychology. In addition to these content courses, students must take Education 105, 150, 241, 282, 305, 470 and 490. Education certification also requires two English courses (one writing and one literature) and two math courses.

General Science Certification

Elizabethtown College offers a certification program in **General Science** designed to lead to a general science teaching certificate in secondary education with a major concentration in biology, chemistry or physics. The program develops a comprehensive background for teachers, so they may be better qualified to teach science in the general science curricula of junior high and middle school programs. The requirements of each concentration include a broad exposure to the other sciences and to mathematics, and to the instruction experience in teaching provided by the professional education sequence. The Pennsylvania Department of Education requires two English courses (one writing and one literature) and two math courses for certification. All concentrations require Education 105, 150, 282, 241, 305, 470, and 490, and Philosophy 200. The specific requirements for each concentration are:

Biology: Biology 111, 112 and 211; three courses selected from Biology 235, 313/313L, 324/324L, 331, 332, 341 and 347; Chemistry 105 and 113; Physics 103 and 104; two courses from Earth Science 113, 114, or 215; two courses selected from Mathematics 117, 121 or 251.

Chemistry: Chemistry 105, 113, 114, 201, 214; and seven credits from among Chemistry 116, 242, 323, 324, 326, 327, 343, 344, 354; Biology 111, 112; two courses from Earth Science 113, 114 or 215; Physics 200 and 201; Mathematics 121 and 122.

Earth Science: Earth Science 113, 114, 215 and 216; Biology 103, 111 and 112; Chemistry 105 and 113; Physics 103 and 104; plus one additional course (3 or 4 credits) in Biology, Chemistry or Physics/Engineering; and two course selected from Mathematics 117, 121 or 251.

Physics: Physics 200, 201, 202, 221, 321 and 353; Engineering 210; one additional course in physics or engineering; Biology 101 and either 102 or 103; Chemistry 101 and 105; two courses from Earth Science 113, 114 or 215; Mathematics 121 and 122.

For further information, contact the Biology Department.

Creative Writing Minor

The Creative Writing minor requires six courses from those listed below. All minors take Creative Writing 386 as an interdisciplinary capstone course during their junior or senior year. Of the five elective courses, at least four must be writing-based. No more than three of the five elective courses can be from the same Department. It is recommended that students with limited experience in creative writing take English 180 early in their course of study.

Writing-based courses: Theatre 240; English 180, 280, 281, 286, 287; Communications 315 (prerequisite waived for Creative Writing minors), 424 (prerequisite waived for Creative Writing minors).

Image-based courses: Communications 145; Art 105, 130 (prerequisite waived for Creative Writing minors), Art 145.

Capstone course: Creative Writing 386.

386 Word, Web, and Design
4.00 credits. This advanced course fulfills the capstone course for creative writing minors and the publishing requirement for professional writing majors. The focus of the course is on the presentation of one's work, and how different approaches to presentation can further the purpose of particular projects or become aesthetic and communicative projects in themselves.

For further information, contact Dr. Carmine Sarracino, Director of the Creative Writing Program.

Forestry and Environmental Management Major

Bachelor of Science

The College offers a cooperative program with Duke University's Nicholas School of the Environment and Earth Sciences, which leads to a Bachelor of Science degree from Elizabethtown College and a Master of Forestry or Master of Environmental Management from Duke University. Students undertaking this major gain a wide exposure to the liberal arts by fulfilling the College's Core Program in addition to taking courses in the student's major. The student also gains professional training at Duke in such areas as forest resource management, resource ecology, water and air resources, resource economics and policy, coastal environmental management, or environmental toxicology, chemistry and risk assessment.

In this program, the student spends three years at Elizabethtown College, earning at least 101 credits before transferring to Duke. A grade of B- or better is required in all prerequisite courses. The student spends at least two years at Duke's School of the Environment. In the first year at Duke, the student completes the undergraduate degree requirements (24 credits) and is awarded the Bachelor of Science degree from Elizabethtown. After an additional two or three semesters, Duke awards the degree of Master of Forestry or Master of Environmental Management. The program leading to a Master of Forestry degree from Duke University is accredited by the Society of American Foresters.

In order to prepare students for the professional program at Duke, the College offers a Preforestry and Environmental Management program with major and minor concentrations in Biology, Business or Political Science. While any undergraduate major can be considered for admission to Duke, the student should take at least one year of biology, mathematics and economics.

Admission to Duke is by application and is based on an evaluation of a student's undergraduate record, Graduate Record Examination scores, letters of recommendation and interviews. To effectively compete for acceptance, the applicant's grade point average should be at least 3.50.

There are variations of the schedule described below. For further information, contact Dr. Thomas Murray of the Biology Department.

Majors must complete all Elizabethtown College Core Program requirements. The following courses should be taken:

Mathematics: (four credits) Mathematics 117, 121 or 251. If Mathematics 251 is not taken for Core, it is strongly recommended as an elective. If Mathematics 121 is not taken, Mathematics 117 will satisfy the calculus requirement.

Natural and Physical Sciences: (eight credits) Biology 111 and Chemistry 105.

Each student completes a major concentration in Biology, Business or Political Science, and two minor concentrations totaling 18 credits in the other two areas with at least six credits in each area.

Biology major concentration recommendations are Biology 112 and 313-313L; at least eleven credits from Biology 211, 212, 235, 317, 331, 332 or 347. Minor concentration recommendations are Biology 112 and 331. Chemistry 113 and 114 are required for Environmental Toxicology, Chemistry and Risk Assessment programs.

Business major concentration recommendations are Accounting 101; Economics 101, 102; Business Administration 265, 330, 331 and Computer Science 120. Minor concentration recommendations are any combination of Accounting 101, Economics 102, Computer Science 120, Business Administration 265. Economics 102 is strongly suggested.

Political Science major concentration recommendations are Political Science 111, 301, 361, 471. Minor concentration recommendations are Political Science 361, 471; if only six credits are elected, they should be Political Science 471.

General Science Minor

The **General Science minor** offers students the opportunity for study of the natural sciences as a group, based on the view that the natural sciences together are the area of secondary interest for the student.

This minor is especially appropriate for, but not limited to, elementary education majors with aptitude and interest in the natural sciences. Although some students may wish to complete a minor in a separate science discipline, others may want a wider curricular base and mix in the content they wish to study. The general science minor provides this while retaining unity and focus. Further, in addition to providing breadth of study of the natural sciences as a group, it allows for a measure of investigation in depth of a selected discipline.

The minor in General Science requires seven courses (at least 27 credits). One required course must be selected from each of the following five disciplines:

Mathematics: Mathematics 117 or 121.

Earth Science: Earth Science 113, 114 or 215.

Physics: Physics 103, 105 or 200.

Chemistry: Chemistry 101, 105 or 109.

Biology: Biology 101, 102, 103 or 111.

Two or more elective courses (totaling at least 7 credits) chosen from any biology, chemistry, earth science, physics or engineering courses 200-level or above (or at 100-level if the elected course has a prerequisite in the same discipline that also must be completed).

For further information, contact the Department of Physics and Engineering.

Human Services Minor

A minor in **Human Services**, consisting of a minimum 20 credit hours, is available. The minor provides students the knowledge, values and skills to explore society's social problems and the intricate social welfare system designed to assist people in need. It also provides the student with an overview of human behavior, social problems and the development of American social welfare institutions. All students, except social work majors, may pursue this minor. The requirements for the Human Services minor are (unless otherwise noted, all courses receive four credits):

Required courses: Three required courses (12 credits) must be taken: Social Work 160, 233 and 280.

Elective courses: A minimum of eight elective credits of the following courses (four credit hours of which must be outside of the Department of Social Work) also must be taken:

Social Work: Social Work/Education 332; Social Work 260, 339, 344, 355, 357, 366, 481.

Sociology and Anthropology: Anthropology 111; Sociology 204, 216, 218, 220, 301, 305, 342.

Education: Social Work/Education 332; Social Work 270, 282, 362.

Communications: Communications 252.

Modern Languages: American Sign Language 325 (two credits).

Occupational Therapy: Occupational Therapy 440.

Political Science: Political Science 361, 365.

Psychology: Psychology 221, 225, 237, 401.

Women and Gender Studies: Women and Gender Studies 105.

For further information, contact Dr. Vivian Bergel, Department of Social Work.

International Studies Minor

The **International Studies minor** is comprised of a cluster of foreign culture, language and international affairs courses with a largely contemporary focus. Serving as a complement to the academic major, this minor provides the student with enhanced understanding of the conditions in the rest of the world that are making themselves felt in the daily lives of Americans. In addition to the general liberal arts goal of broadening students' horizons of awareness of other peoples and places, the minor offers a valuable complementary education for many career-oriented and pre-professional programs of study.

The minor provides three principal categories of an international education: competency in a second language, knowledge of other cultures, and appreciation of global interdependence among nations.

The requirements for an International Studies minor are 32 credits as follows:

Foreign language competency (8 credits) in oral and written communication through language and culture beyond the Modern Language 112 level with an oral proficiency rating of Intermediate High/Level I + on the ACTFL/ETS scale or acquired high proficiency on the Japanese Foundation Proficiency Test as determined by the Modern Language Department.

Required Foundation courses (12 credits) Anthropology 111; Economics 307 or 311; Political Science 245.

Three elective courses (12 credits) to be chosen from this list: Anthropology 307, 308; Business Administration 317, 327, 337, 367; Economics 307 or 311; French/German/Spanish 311, 323; Spanish 312, 319; Political Science 252, 345, 348; Religious Studies 291, 292; Sociology 204.

In developing the minor, the student can choose electives to develop a thematic emphasis, such as regions of the world (e.g., Asia, developing nations), relations among nations, or a comparative or disciplinary perspective (e.g., on civilizations, religions, economics or politics). Study abroad is strongly encouraged. The International Studies Minor program advisor helps the student select courses.

For further information, contact Dr. R. William Ayres, International Studies Minor Program Advisor.

Peace and Conflict Studies Minor

The interdisciplinary minor in **Peace and Conflict Studies** consists of six courses and a capstone project. The curricular model incorporates three types of courses: required courses, elective courses in a variety of disciplines, and a capstone seminar research project. In order to provide students with adequate conceptual tools and conciliation skills, the program of study is multi-disciplinary in both method and instruction. The introductory courses orient students to basic concepts and approaches in peace and conflict studies. The elective courses, selected from several disciplines, enable students to shape a personal program of emphasis that taps the analytic and practical resources of various academic fields. The capstone project requires students to synthesize concepts and knowledge from several disciplines in order to address a research problem of practical or theoretical interest.

The requirements for the Peace and Conflict Studies minor are:

Required introductory courses: Peace and Conflict Studies 165 and Religious Studies 264.

Elective courses: (3 courses) from the following: Business Administration 251; Communications 251, 252; Economics 311, 312; English 251; History 212; Occupational Therapy H302; Peace and Conflict Studies 460; Political Science 245; Psychology 235; Religious Studies 245, 261, 269, 283, 344; Sociology 204, 301; or Social Work 160. No more than two elective courses shall be chosen from any one Department and at least two of the elective courses must be taken outside the student's major Department.

Capstone: A required capstone project designed to integrate previous work and culminate in a major research paper: Peace and Conflict Studies 465.

160 Conflict Resolution Practicum
Variable credit. Basic skills required for nonadversarial conflict resolution are provided with significant devotion to exercises and simulated conflict solutions that teach the practice of alternative dispute resolution. Two principal paradigms of conflict resolution: meditation and conferencing receive specific attention.

165 HUM Peace, War, and Nonviolence
4.00 credits. **(Humanities Core Course)** This survey introduces key concepts and issues in the study of peace and war. The course explores substantive meanings of peace and war, the reasons for war, and the attempts to build both negative and positive peace. The course grants sustained attention to the pacifist tradition and historical tactics of nonviolent resistance.

465 Directed Research Project in Peace and Conflict Studies
4.00 credits. This course is a capstone seminar designed to integrate previous coursework and produce a major research project. **Prerequisites: all other requirements for the Peace and Conflict Studies minor.*

470 Peace and Conflict Studies Internship
Variable credit. Internships with advocacy groups, government agencies, research institutes, and other not-for-profit organizations in the fields of nonviolence, social justice, human rights, disarmament, environmental protection, and Third World development are encouraged. Up to six hours of academic credit may be earned for the internship. **Prerequisites: PCS 160 and 165*. Register by Instructor.

For further information, contact Dr. R. William Ayres, Peace and Conflict Studies Minor Program Advisor.

Political Philosophy and Legal Studies Major

Bachelor of Arts

The interdisciplinary major focuses on the origins, development and theoretical foundations of Western political philosophy and law. Combining courses from political science, philosophy and other liberal arts disciplines, this major especially is recommended for students who either are considering careers in law or higher education and/or are desiring an intellectually challenging, broad-based traditional liberal arts education.

Courses in political science focus on issues such as justice, order, rights, the human condition, and the purposes and ends of law and government. The philosophy courses explore the metaphysical, epistemological and ethical assumptions undergirding the competing concepts of human nature and society. Students are encouraged to examine the implications of political philosophy on contemporary social and political movements.

For students who are interested in law school, a strong advisory component in terms of proper course work, relevant extracurricular activities and preparation for the Law School Admissions Test (LSAT) examination is offered.

A Political Philosophy and Legal Studies major requires 42 hours: Economics 101; History 215; Philosophy 110; Political Science 223, 224, 301, 302. Sixteen credit hours (four courses) are required from the Political Science, Philosophy and History Departments, with a minimum of one course per Department, chosen from the following: Political Science 305, 311, 324, 326, 328, 329, 348; Philosophy 213, 255, 305, 470-479; History 115, 201, 202, 210, 216, 309, 311, 312; and Modern Language at 112 level or higher. Philosophy 470-479 will provide students with practical experience in a law-related field under the guidance of a faculty member teaching in the Political Philosophy and Legal Studies Program.

Pre-Law Advisory Program

Because the training of a pre-law student may be accomplished in almost any academic discipline – such as English, history, political science, philosophy or business – a committee assists pre-law students during their undergraduate years.

The Pre-Law Committee works with the pre-law student and the student's major advisor to ensure that a reasonable and sound course of study is followed that is acceptable for entry into a school of law. The committee aids the student in selecting a suitable school and advises the applicant on the registration and the preparation for the Law School Admissions Test. The committee guides the students in preparation and submission of applications and supervises the requests for letters of recommendation for worthy candidates.

In order to create the most effective curriculum, students interested in pursuing law school should introduce themselves to the Pre-Law Committee early in the first year to discuss future course scheduling and long-term plans.

The Pre-Law Committee also supervises the activities of the Law Club and works closely with the College's mock trial team, which participates in regional and national mock trial tournaments. Both of these activities are highly recommended for pre-law students. Participants in the mock trial competitions are urged to take Mock Trial I and II, which are taught in the fall and spring semesters. These courses prepare students to participate in intercollegiate tournaments held in the spring semester and are taught by a practicing attorney.

Women and Gender Studies Minor

Women and Gender Studies (WGS) uses the concepts of gender, race/ethnicity and class to analyze all dimensions of human experience. WGS is an interdisciplinary minor that complements any major and is excellent preparation for today's diverse workplace. Recent Elizabethtown graduates minoring in the program have gone on to careers in occupational therapy, banking and science or have pursued advanced degrees.

Students in WGS classes consider questions like the following: How do women and men differ, and how do we explain the differences (nature, nurture or both)? Why was winning the vote so important for women, African-Americans and Native Americans, and has everyone in the United States achieved equal rights and opportunities today? Who earns more, men or women, and why? Are Barbie, Superman, Cinderella and the Incredible Hulk good role models for small girls and boys?

Women and Gender Studies emphasizes activism as well as academics. The program sponsors an annual film series in conjunction with the student Allies and

Womenspeak groups. WGS faculty and students help to organize the Women's History Month celebration each spring and have performed together in a student-directed production of "The Vagina Monologues." Many WGS classes have a service-learning component, and students have done volunteer work to benefit women and families in nearby communities.

The WGS minor requires a minimum of 21 credit hours, comprised of six courses. Note that several of these courses also satisfy Core requirements or may count toward a student's major.

Required courses: Women and Gender Studies 105, 315 and either 462 or 464.

Elective courses: Three courses – at least one and not more than two – from each category: Humanities and Social Sciences.

> **Humanities electives**: Communications 252, Multicultural Communications; English 251, Multicultural Literature; English 317, Studies in Narrative: Women Writers; Religious Studies 323, Women, Gender, and the Hebrew Bible.
>
> **Social Science electives**: Political Science 365, Women and Politics; Psychology 237, Psychology of Women; Sociology 204, Population and Global Issues; Sociology 305, Marriage and the Family; Social Work 339, Human Sexuality; Social Work 355, Women in Society.

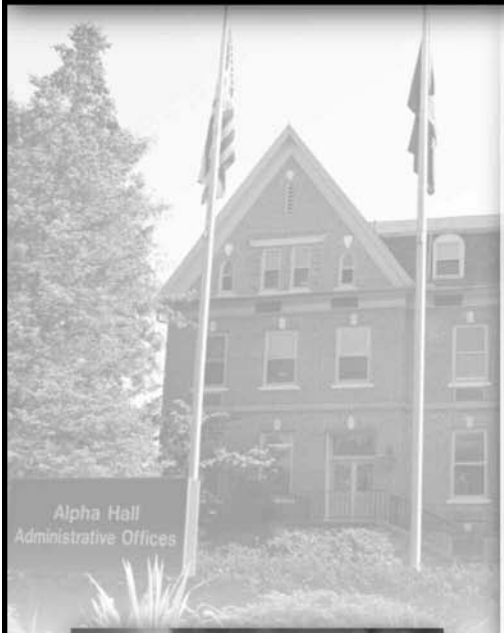
105 SSC Sex and Gender in Society
4.00 credits. **(Social Sciences Core Course)** An introduction to the field of gender and women's studies that helps students understand the social construction of gender and its influence on women's and men's lives. The course addresses historical perspectives on women, men and gender; the structure of public and private institutions such as the home, schools, and the workplace; and contemporary issues, such as mass media images of women, health, and discrimination and violence. Social science research methods and feminist methods of inquiry are stressed. Offered every semester.

315 Feminist and Gender Theory
4.00 credits. An interdisciplinary study of theory and research methods, this course continues students' investigation of fundamental concepts (e.g., sex, gender, race/ethnicity and class). It also covers the political positions that have defined the American women's movement, such as individual rights; the appropriations and revisions of major theories by feminist thinkers (e.g. Marxism, psychoanalysis); and the grounding of theories in experiences unique to women, such as motherhood. **Prerequisites: WGS 105 and junior or senior standing.* Offered alternate years. Register by Instructor.

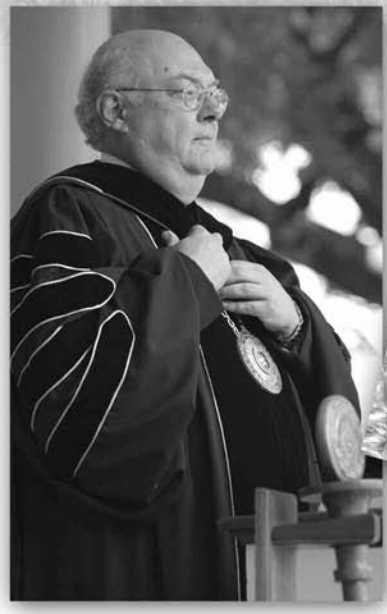
462/464 Directed Research Project
Variable (2.00 or 4.00) credits. This required capstone course allows students to design a project integrating previous course work and their own interests in the interdisciplinary field of Women and Gender Studies. Each student produces a major research paper or equivalent project (such as an internship) and is encouraged to present the results publicly. Students take either the two-credit or four-credit version of this course. *Prerequisites: WGS 105, WGS 315, and two WGS elective courses from different Departments.* See the Director of Women and Gender Studies for more information. Offered every semester. Register by Instructor.

For further information on the minor, contact Dr. Mahua Bhattacharya, the Director of Women and Gender Studies.

Academic Policies



The Academic Program
Registration
Class Absences
Withdrawal Policy
Grades and Quality Points
Final Examination Policy
Academic Standing
Academic Honors
Credit by Examination
Graduation
Graduate Program
Academic Judicial System
Grade Appeals



Academic Policies

The Academic Program

Each student enrolled in a degree program is required to complete a major. In addition, students have the option of pursuing a second major and/or one or more minors outside their major discipline.

The student's course work in the first two years is largely intended to fulfill the requirements of the Core Program, which provides a broad education. In addition, many students will pursue course work in their intended major or, if they are undecided, explore majors through choices of electives and/or Core courses. In the junior and senior years, students focus on their major area of study, although many majors allow time for a wide range of electives in addition to the prescribed courses required in the major program.

Academic Advising

Advisors are assigned for majors, second majors and minors. Certain non-degree students also are assigned advisors.

The First-Year Advising Program is designed to touch on all aspects of the first-year experience, assisting new students to better understand themselves and to learn to use the College's resources to meet their educational needs and aspirations.

Upperclass advisors work closely with students during the registration period for course selection for the coming semester. For those upperclass students who have declared a major, these advisors also provide assistance in regard to graduate or professional school and/or career planning.

See the Student Life chapter of this Catalog for more information about the First-Year Advising Program and upperclass student advising.

Student Responsibilities

Students are required to consult with their major advisors as to course selection, course sequences, graduation requirements, etc. Consultation with the second major or minor advisor is an expectation, but not a requirement. **It is the student's responsibility to ensure that all graduation requirements have been met and that other requirements, regulations and deadlines have been observed.**

Advising Sheets and Degree Audits

Advising sheets for academic majors and minors are available from the Office of Registration and Records' website. These sheets list the requirements for a program and can be used by students to track their progress.

In addition, electronic degree audits are available to students and their academic advisors through ECWeb. The degree audits match the student's course work against the requirements for a degree and note which requirements are met and which still are required. Students are encouraged to review these materials at the start/end of every semester. While the degree audit is usually accurate, at times the complicated nature of a program may lead to inaccuracies. If there are inaccuracies, students are responsible for reporting these to the Office of Registration and Records. An error in the degree audit does not change the actual requirements for graduation; in particular, unfulfilled requirements are not waived because of degree audit errors. **The responsibility for understanding and meeting degree requirements rests with the student.**

Declaration and Change of Major/Minor

Declarations and changes of majors and minors are initiated by the student and facilitated by Academic Advising in the Center for Student Success. When a change of major or minor occurs, a student's record is transferred from one Academic Department to another.

Change of Personal Information

Any change of name, address, telephone number or marital status must be reported to the Office of Registration and Records immediately either as a request through the College Web system or in written form. E-mailed and telephoned changes cannot be accepted. This information must be kept current so that there will be no delay in receipt of information from the College. Changes of name, gender, social security number, etc., require legal documentation.

Academic Load and Progress

Since the completion of at least 125 credits is required for a bachelor's degree, a student who plans to graduate in four years must satisfactorily complete an average of 16 credits in each of eight semesters. However, some students wisely elect to take a lighter academic load in order to do better work and choose to attend a summer session or partial fifth year.

Credit

"Credit" is equivalent to "semester hour." A semester hour signifies work completed in one 50-minute recitation period per week or two or more 50-minute laboratory periods per week for a semester of 15 weeks or an equivalent learning experience.

Full-time/Part-time Status

An undergraduate student taking 12 or more credits per semester at Elizabethtown College is considered a full-time student and pays full tuition and fees.

An undergraduate student taking fewer than 12 credits per semester is considered part-time. Part-time students pay the regular semester credit rate plus applicable fees and receive a library card and full use of the library facilities.

National Collegiate Athletic Association regulations stipulate that a student must carry a minimum of 12 credits per semester to be eligible for intercollegiate athletic competition.

Overload Credits

Undergraduate students may carry up to 18 credits in a semester or eight credits in a six-week summer session. A student who achieves a cumulative grade point average of 3.20 or above, or has the approval of the Associate Dean of the Faculty or the Registrar, may carry up to 20 credits in a semester or 12 credits total for all summer sessions (i.e., May term and the six-week evening session combined). An additional tuition fee is charged for credits in excess of 18 credits in a semester. A petition form for overload credit is available in the Office of Registration and Records or on the office's website at www.etown.edu/registration.

Class Standing

The student's class standing is determined on the basis of the number of credits earned. After earning 30 credits, a student is considered a sophomore; with 60 credits, a junior; with 90 credits, a senior.

Transfer of Credits

A current student who wishes to transfer credits to Elizabethtown College must obtain permission in advance from the Office of Registration and Records. The College transfers credits – but not grades or quality points – for course work taken at another regionally accredited institution for which a grade of C- or better is obtained. The College does not accept courses taken Pass/No Pass

(or Satisfactory/Unsatisfactory) at other institutions. The College is not obligated to accept course work for which written permission was not obtained prior to enrollment in the course.

Students who have achieved junior status (60 credits) either through work at Elizabethtown College or a combination of work at the College and another institution are not permitted to transfer additional credits from two-year institutions to Elizabethtown College. Such students may transfer credits from four-year institutions, but only with the prior approval of the Registrar. Students must request that the Registrar's Office of the transferring institution send an official transcript to the Office of Registration and Records at Elizabethtown College. Facsimiled and student-delivered transcripts will not be accepted.

The records of transfer students from non-accredited and National/American Association Institutions are evaluated on an individual basis.

For more information regarding transcripts and course transfer, contact the Office of Registration and Records (717) 361-1409 or visit the office's website at www.etown.edu/registration.

Transcripts

Transcript requests must be sent to the Office of Registration and Records and must be received at least one week prior to the date needed. Federal law requires that all requests be made in writing by the student. Telephone requests and e-mail requests cannot be honored. Transcripts also cannot be requested by parents, friends, spouses or potential employers.

No transcripts of record are furnished to students whose account is not paid in full. There is no charge for transcripts.

Transcript request forms are available in the Office of Registration and Records or by printing a copy from the office's website at www.etown.edu/registration. Letters are accepted instead of the form.

The following information must be included in all requests: 1) name(s) and address(es) to whom the transcript is to be sent, include specific names/offices when possible; 2) dates of Elizabethtown College attendance; 3) student's full name, including maiden name if applicable; and 4) student's signature.

Students may print unofficial transcripts via the College web system. Unofficial transcripts might not be acceptable to other institutions or potential employers. Elizabethtown College does not send or accept facsimile copies of transcripts.

Registration

Students register for classes on those days designated on the College calendar. No registrations are accepted after the first week of a semester. Students register for the fall semester in April. Spring semester registration takes place in November. A student may register either as a degree or a non-degree student and as a full-time or part-time student. Regular students are degree candidates, and they must be in an approved major.

Many courses have prerequisites, and students are reminded of their responsibility for meeting all prerequisites and for taking courses in proper sequence.

To register for the next semester, a student must have met all financial obligations. Students who do not register during the registration period cannot be guaranteed space in the residence halls or classes. Students must meet with their advisor prior to registration, and the advisor must remove the "advising hold" before students can register online through ECWeb.

Registration Holds

A student's registration may be delayed as a result of unpaid account balances, incomplete academic records, disciplinary sanctions, failure to meet with the advisor, failure to provide current off-campus address information, or incomplete health records. For full-time students, the health record must include a Health Services Physical Form and evidence that all required immunizations have been received.

Schedule Changes

Students who have registered may make changes to their schedule via the College Web system on a space-available basis.

Adding Courses

Students may add courses to their schedule during the first week of a semester by accessing their academic schedule via the College Web system. Course additions must be completed by 5 p.m. on the fifth class day of the semester.

Dropping Courses

Courses dropped from a student's schedule during the first four weeks of a semester do not appear on the student's academic record. Drop request forms are available in the Office of Registration and Records. The completed form must be signed by the academic advisor and returned to the Office of Registration and Records. A student is not dropped or withdrawn from a class simply by discontinuing attendance or by notifying the professor. The

completion of any registration change is the responsibility of the student, not the faculty member. Seniors should keep in mind that dropping or withdrawing from a course could jeopardize their graduation clearance.

Withdrawal from Classes

Students withdraw from classes through the Office of Registration and Records. The course will not appear on the permanent record if the student withdraws (i.e., drops) on or before the end of the fourth week of the semester. From this time to the end of the 11th week, a withdrawal will result in a grade of W. All withdrawals after the end of the 11th week of the semester receive a grade of WF unless the withdrawal is from College and is for medical reasons, in which case a W is recorded for each course. A student may not withdraw from individual courses for medical reasons. A grade of WF is calculated into the student's average as though it were an F.

Repeating Courses

Courses that are eligible to be repeated must be taken at Elizabethtown College and not at another institution as a transfer course. The most recent grade is final and is used in the calculation of semester and cumulative grade point averages. A course must be repeated in the same manner in which it was originally enrolled (i.e., a course normally cannot be repeated as a Directed Study unless it was originally registered as a Directed Study).

Students may repeat any course in which they earned an F or NP. Under certain conditions, students may be able to repeat a course in which they earned a C- or a grade in the D range. To do so, the following conditions must be met:

The course to be repeated must be in their major/minor or be a course that is a prerequisite to a Core Program requirement.

The student must have the approval of their advisor and the major/minor Department Chair.

The student must file a repeat registration card in the Office of Registration and Records. Failure to do so will result in a duplication of credits carried, a possible delay in graduation, and a decrease in the cumulative grade point average.

Auditing Courses

Students in good academic standing (2.00 or better) may elect to audit courses provided they do not preempt regularly enrolled students and they have the permission of the professor teaching the course.

The requirements for the audit are determined by the professor. Upon completion of all such requirements, the audit is posted on the student's permanent record card. Audit courses carry neither academic credit nor grade.

Audit credits are included in the total credits to determine full-time status and overload charges. A fee is charged on a per-credit basis for part-time students who wish to audit courses. Auditors – both full-time and part-time – also must pay any additional fees for labs, studio supplies and other direct costs. Students may add a course for audit or change a course registration from audit to credit during the first week of class only. Change of course registration from credit to audit cannot be made after completion of the fourth week of the semester. Once a course has been audited, it may not be taken for credit. Likewise, a course that has been completed for credit may not be repeated and recorded as an audit course.

Class Absences

Class Attendance

Class attendance policy is determined individually by faculty members. It is the position of the College that the above-average student should be given some freedom of judgment as to attendance needs, while the average student must, of necessity, be encouraged or required to maintain a record of regular attendance.

Each faculty member announces his or her attendance policy at the start of each semester. **A professor or the College may dismiss a student from a course for excessive absences.** Such a dismissal in the first through fourth weeks of the semester results in removal of the course from the student's record; after the fourth week, a grade of WF is recorded for the course. A student may appeal to the Academic Standing Committee for reinstatement to the course.

Students are responsible for consulting with the professor in the case of absences due to illness or other personal problems.

Long-Term Absences

A long-term absence from classes or from campus may result in mandatory withdrawal from the College. After 15 consecutive class days of absence from all classes, a student is considered to have withdrawn from the College. Students absent for verified medical reasons will be granted a Medical Withdrawal (see subsequent section within this chapter).

Withdrawal Policy

Withdrawal from College

Students who withdraw from the College during a semester also withdraw from all of their classes for that semester. Full-time students withdraw from the College through the Center for Student Success; part-time students withdraw through the Office of Registration and Records. Students who withdraw during the semester are expected to leave the campus as of the effective date of their withdrawal.

For purposes of billing, room reservation, academic responsibility, etc., the effective date of withdrawal is the date on which the completed official notice is returned to the Center for Student Success or the Office of Registration and Records. A student who withdraws without notification receives no refunds and may incur the full room penalty. Failure to comply with withdrawal procedures may result in loss of the privilege of readmission to the College and the right to the release of a transcript of credits earned. Additional information on the Institutional Refund Policy as it relates to withdrawals is contained in the Tuition and Financial Aid chapter of this Catalog.

Medical Withdrawal

A student may withdraw from the College for reason of a serious illness or similar, medically related circumstances. Medical withdrawal assumes an incapacity that prohibits acceptable academic performance, not simply a hardship or inconvenience. Such withdrawal requires written verification from a physician, including diagnosis and dates of treatment. Upon receipt of verification, a proportionate refund is granted. Students granted a medical withdrawal must have approval from the Director of Counseling Services before returning to the College.

Medical withdrawal is withdrawal from the College and therefore from all courses. A student does not selectively withdraw from individual courses under the rubric of medical withdrawal.

Leave of Absence

Students in good academic standing may take a leave of absence from the College for a period of time not to extend beyond the academic year in which the leave is taken. Leaves of absence can be requested for personal reasons (e.g., to address a family issue) or for academic reasons (e.g., to study in an approved off-campus program). For most off-campus programs, students must work through the Office of International Programs. Application for off-campus programs must be made through the Office of International Programs no later than the registration period of the semester prior to the one in which the leave begins. Administrative fees for off-campus programs are payable at the time a student applies for the leave.

A leave is approved upon the student's acceptance into the program. Registration information is sent to students on leave prior to registration. The registration form and deposit must be returned to the Office of Registration and Records by May 1 or December 1 to ensure a place in the College and in courses. All other leaves of absence (i.e., those not involving an approved off-campus program) must be approved by the Director of the Center for Student Success.

Readmission

Students who leave the College in good academic standing (minimum 2.00 cumulative grade point average) gain readmission by written request to the Office of Registration and Records. Students who leave the College while in academic difficulty (below 2.00 cumulative grade point average) must petition the Academic Standing Committee for readmission. A student who is readmitted to the College after an absence of five successive years may petition to have previous grades of F removed from his/her cumulative grade point average. In order to be eligible to petition for this, students must have completed 16 consecutive credits at Elizabethtown and earned a grade of C or better in each class. If the petition is approved, the old F grades remain on the transcript but are removed from the student's overall grade point average. For further information, students should consult with the Office of Registration and Records.

Grades and Quality Points

Grades are reported as A, B, C, D and F. Plus and minus distinctions are made. Designations of I, W, WF, P, NP and AUD are used in appropriate situations.

Grade definitions are:

A	Distinguished
B	Above Average
C	Average
D	Poor
F	Failure
I	Work Incomplete
W	Withdrawal from Course
WF	Withdrawal Failing from Course
P	Pass
NP	No Pass (Failure)
AUD	Audit

Grades submitted to the Office of Registration and Records are considered official at the time submitted. Official grades can be changed only by successful

appeal under the College's Grade Appeal Policy or by an instructor's petition to the Dean of Faculty to correct a documented grading error.

Grade appeals and evidence of grading errors must be submitted within 30 days of the date on which the grade was formally issued from the Office of Registration and Records. Exceptions to the 30-day time limit require formal petition to and approval by the Academic Standing Committee.

Incomplete Grades

A grade of Incomplete (I) may be obtained by making a formal request to the professor of the course in question. The student and the professor must sign a written agreement that specifies the nature and the quantity of work to be completed and the projected date of completion. A grade of Incomplete is assigned for extenuating circumstances only. It is not simply given to allow additional time to complete required course work or to improve a course grade. In addition, a professor may use a grade of Incomplete in cases of suspected academic dishonesty.

All incomplete grades received in the fall semester must be removed by April 1. Those received in the spring semester or summer session must be removed by October 1. Failure to do so results in a grade of F.

Quality Points

A 4.00 quality point system is used. Quality points are assigned as follows:

Letter Grade	Quality Points per Semester Hour of Credit
A	4.00
A–	3.70
B+	3.30
B	3.00
B–	2.70
C+	2.30
C	2.00
C–	1.70
D+	1.30
D	1.00
D–	0.70
F, WF	0.00

Grade Point Average Calculation

The grade point average is dependent upon the credits attempted and the quality points earned. To determine the quality points earned for a semester, multiply the credits for each course by the quality points for the grade earned in the course, sum the results, and divide by the total credits attempted in the semester. Courses in which a grade F or WF is received are included in the calculation. Courses in which a grade of W or I is recorded are excluded, as are Pass/No Pass and Audit courses.

The cumulative grade point average and the grade point average in majors and minors are calculated in the same manner as the semester grade point average. All courses that could fulfill a requirement for the majors or minors – whether in excess or not – are used for the grade point average calculation.

Pass/No Pass Grading

The Pass/No Pass grading option is intended to encourage students to explore areas of study beyond those of their major or minor. Courses registered on the Pass/No Pass basis earn credits (for grades of P) but are not included in the calculation of the grade point average. Students may select one course per semester to be graded in this manner under these conditions:

A student must currently have junior or senior standing (60 or more credits).

The student must have a cumulative average of 2.75 or higher.

The selected course may carry no more than four credits and must be a free elective. It may not satisfy a Core Program requirement **(no Core courses can be taken Pass/No Pass)** and may not be a course that could fulfill a requirement for the student's major or minor. However, if major/minor requirements are already met (i.e., completed, not in progress), then an additional course in the major/minor Department can be taken Pass/No Pass.

No more than four courses in total (excluding Physical Education activity courses) may be taken under this grading option.

All students may elect to take Physical Education courses Pass/No Pass. Pass/No Pass registration opens at the end of the second week of classes and must be completed by the end of the fourth week of the semester. Forms are available in the Office of Registration and Records. Once a course is registered under the Pass/No Pass option, it may not be changed. Grades of D- or higher are recorded Pass; grades of F are recorded No Pass. Students should be aware that courses taken Pass/No Pass may not be transferrable to other institutions.

Early Warning System

Mid-term grade reports are not issued. However, an early warning system is used. Students carrying D or F grades in 100- or 200-level courses at the end of the fifth week of the semester are notified of their deficient performance. These students are encouraged to consult with their instructors and to make use of Learning Services resources in order to improve their performance.

Final Examination Policy

All academic courses are expected to conclude with a final examination administered during the assigned time of the examination period. Within the last three meeting days for classes (not for any individual course) prior to final examinations, no unit tests or quizzes of any type may be administered. Due to the structure of courses involving laboratory examinations/practica, a laboratory examination/practicum can be given during these final three days prior to final examinations. In addition, major papers and projects can be assigned due dates that fall within the last three meeting days for classes, providing the due dates are specified in the syllabus.

Depending upon the judgment of the instructor, the following may or may not have a final examination: a laboratory section; an advanced seminar, in which an assigned paper or project is the major activity; a performance class, in which a recital or similar artistic performance is required; an internship or a practicum. Any faculty member seeking an exception to the final examination rule for an academic course shall first secure the approval of the Department Chair and then the approval of the Provost.

Students as well as faculty members are expected to abide by the published examination schedule. However, students with three examinations in one day may request of a professor that one examination be rescheduled during the examination period. There is no obligation on the part of the faculty member to reschedule the examination. All requests for rescheduling an examination must be made at least five class days before the start of the final examination period. Students with four examinations in one day may request that one or two of the examinations be rescheduled, following the same procedure. When a scheduling conflict cannot be resolved between the faculty member(s) and the student, the student may appeal to the Provost.

Academic Standing

Students in academic good standing maintain a minimum 2.00 cumulative grade point average.

Academic Probation

Academic probation means that a student is in danger of being dismissed from the College for academic reasons. Students who fall into the following categories are placed on academic probation and may also be required to sign an academic contract:

Semester Hours Attempted	with	Cumulative Grade Point Average Below:
1 - 18		1.70
19 - 34		1.90
35 or more		2.00

Students on academic probation or contract normally should limit their academic load to three courses – or a maximum of 13 or 14 credits – in any semester in which the probation exists. The summer maximum should be two courses or eight credits.

Academic Dismissal

At any time, the College – upon the recommendation of the Academic Standing Committee – may dismiss a student who is experiencing academic difficulty. A student should be aware that all cases are decided individually and that poor academic performance may result in dismissal at the end of any semester. Further, violations of the conditions of an academic contract may result in dismissal at any time of the semester.

A student who is in academic difficulty (below 2.00 cumulative grade point average) may be requested by the Academic Standing Committee – in consultation with the student – to enroll in a special or particular set of courses and to become involved in testing, counseling or other developmental activities. A student's satisfactory performance in such assignments may be interpreted by the Academic Standing Committee as satisfactory progress and may make it unnecessary to recommend dismissal.

Individual Program Adjustments

Academic Departments reserve the right to counsel any student out of a major or minor for academically related reasons. A student has the right to appeal such Department action to the Provost, who will direct warranted appeals to the Academic Standing Committee.

Academic Honors

Dean's List

A full-time undergraduate student who earns a semester grade point average of 3.50 or better in nine or more credit hours of letter-graded course work is regarded by the College as having performed with distinction. The student is placed on the Dean's List of Honor Students for the semester.

College Scholars

A College Scholar is a currently enrolled, full-time undergraduate student who – having completed at least 60 credits in consecutive semesters of full-time study at Elizabethtown College – has achieved a cumulative grade point average of 3.75 or higher. Scholars are identified at the end of the spring term and are recognized publicly at Convocation, which is held at the beginning of the following academic year. They are awarded a certificate and their status as a College Scholar is recorded on their permanent record.

Graduation with Honors

At the time of graduation, an undergraduate student who has achieved a cumulative grade point average of 3.50 is graduated *cum laude;* of 3.75, *magna cum laude;* of 3.90, *summa cum laude.*

A transfer student is eligible for and receives these same honors if the student earns a minimum of 60 credits at Elizabethtown College and is recommended for honors by the major Department.

Honors in the Discipline

Honors in the Discipline is awarded at graduation to outstanding undergraduates majoring in the various disciplines. To receive this designation, the student must prepare a research or creative project, which when completed must be judged outstanding by the faculty of the Department. An invitation of the major Department is required for a student to begin an honors project. In addition, a grade point average of at least 3.50 in the major is required.

Honors in the Discipline is noted in the graduation program and on the academic transcript. A student may receive recognition in more than one discipline. Departments may recognize more than one graduate in a year. Each Department determines the specific criteria used to judge its students' projects.

Scholar's Privilege

With the permission of the instructor, a full-time undergraduate student who appeared on the Dean's List of Honor Students for the preceding semester may attend any class at the College on a space-available basis as a scholar's privilege without registration or credit.

Departmental Student Privilege

With the permission of the instructor, a full-time or part-time junior or senior student may attend any class within the student's major or minor Department on a space-available basis without registration or credit.

Credit by Examination

There are three ways for regularly admitted students to receive academic credits and/or advanced placement by examination: 1) College Entrance Examination Board's (CEEB) Advanced Placement Program (AP); 2) College-Level Examination Program (CLEP); and 3) successful achievement on an Elizabethtown College faculty examination (Challenge Testing).

CEEB Advanced Placement Examinations

With the approval of the Department concerned, the College grants advanced placement and credit to students who perform satisfactorily on a CEEB AP Examination. A complete list of how AP exams transfer to Elizabethtown is available on the Registration and Records' website at www.etown.edu/registration in the transfer credit section.

CLEP Examinations

Students who have completed high school (or its equivalent) prior to taking the CLEP Examinations may be awarded Elizabethtown College credits according to the recommendations of the American Council on Education (ACE) in place when the exam was taken. Refer to the College Board website at www.collegeboard.com/student/testing/clep/scores.html for the current CLEP transfer recommendations or pick up a copy of the current ACE recommendations for CLEP Examinations from the Office of Registration and Records. All CLEP Examinations successfully must be completed prior to achievement of sophomore status (30 or more recorded College credits). Up to 29 credits may be awarded for CLEP exams and none of the credits may duplicate college credits completed or enrolled in at the time of the examination. In order to fulfill Elizabethtown's Power of Language Core requirement, the CLEP English Composition exam must be taken with the essay.

Challenge Testing

Challenge Testing is a comprehensive term encompassing all tests prepared and/or administrated by Elizabethtown College faculty. The types of Challenge Tests are Tests for Academic Credit and Tests for Placement and/or Waiver.

Tests for Academic Credit are Challenge Examinations requested by a regularly admitted Elizabethtown College student in hopes of receiving credit for a particular course in the College Catalog. Requests for Challenge Examinations must be approved by the Chair of the Department in which the course is listed. Practicums, internships, research courses, First-Year Seminar and First-Year Colloquium in the Core Program are excluded from Challenge Examinations.

Tests for Placement and/or Waiver are given for placement in a course sequence such as modern languages and mathematics. Credit is not awarded.

All Challenge Testing is graded on a Pass/No Pass basis. A grade of Pass indicates that the credit and/or advanced placement is to be awarded.

Challenge Tests given at the initiative of the College are administered without fee to the student. There is a per-test fee for Challenge Tests given at the request of the student. The fee is for the test itself and is charged regardless of the test results. In addition, 50 percent of the appropriate part-time tuition rate in effect at the time the test is administered is charged for academic credit awarded as a result of performance on Challenge Tests.

Placement Testing

Entering students are placed in mathematics, English writing, and modern language classes on the basis of criteria established by the relevant Academic Departments.

Mathematics placement is determined by the Department of Mathematical Sciences using: 1) high school mathematics courses taken and performance in those courses; 2) SAT mathematics score; 3) the student's intended major; and 4) student self-evaluation. Students who need additional preparation before taking a college-level math course are placed in Mathematics 011. Students with a placement of Mathematics 011 are required to complete this course prior to enrolling in a Mathematics Core course. Mathematics 011 does not satisfy the Mathematics Area of Understanding and does not count toward graduation credits. Students may challenge their placement level by taking a mathematics placement Challenge Exam during the fall orientation program.

Placement in English writing courses is determined by the Department of English according to a combination of SAT verbal score and performance in high school English courses. Most students are placed in English 100, Writing and Language.

Some students are placed in English 150, Advanced Writing and Language, or Philosophy 110, Logic and Critical Thinking. All satisfy the Power of Language – English requirement in the Core Program.

Students are placed into modern languages as determined by the Department of Modern Languages based on language background and placement test results. Students who have studied a modern language in high school for two years or more must take the appropriate modern language placement test. If students have studied more than one modern language, they take the placement test in the language in which they have had the most intensive study or the language that they wish to study further at the college level. Students who have studied a language for less than two full years or not at all do not take the placement test and are normally placed at the 111 or beginning level of a language.

Students who wish to use a modern language to fulfill the 100-level Power of Language – Other Area of Understanding in the Core Program complete a modern language course at the 111, 112, 211 or 212 level. Students who demonstrate competence at the 111 level enroll in 112. Students who demonstrate competence at the 112 level enroll in 211. If competence is demonstrated at the 211 level, the appropriate course is 212. If competence is demonstrated at the 212 level, then any 300-level course in that language can be used to satisfy the Power of Language – Other requirement, or students can pursue a different language.

Graduation

The Ceremony

Graduation from Elizabethtown College is celebrated once each year in May. The ceremony is typically held on the morning of the third Saturday in May, outdoors in The Dell, except in cases of severely inclement weather when the ceremony is held in Thompson Gymnasium. Students who complete all graduation requirements in the previous summer or fall or in the current spring semester are recognized at this ceremony. Undergraduate students majoring in Music Therapy and graduate students in Occupational Therapy who have completed all course work participate in the May graduation ceremony, but do not receive their diplomas until their respective clinical experiences are completed.

Senior students who are not actually graduating may petition to indicate their desire to participate in the Commencement exercises and for verification of their status as a "member of the class." To be eligible for early participant status, students must have a 2.00 grade point average in both the major and overall at the time of the ceremony and **have no more than eight credit hours of course work remaining**, regardless of total number of credits completed. Students in an education program who have not yet completed their student teaching are not

eligible for early participation status. Students approved as "early participants" participate in Commencement with their class, have their name listed in the official program, and are called to the platform for recognition as members of the graduating class. They are not graduates and do not receive a diploma until they successfully complete all requirements. Early participation petitions are due to the Registrar by February 15.

Honors are listed in the Commencement program only for those students who have actually graduated and those whose only remaining requirement is a non-credit clinical experience.

Credit Requirements

To receive a Bachelor of Arts, Bachelor of Science, or Bachelor of Music degree from Elizabethtown College, the student must earn a minimum of 125 credits. (Mathematics 011 is not counted toward these credits.) In the case of engineering, clinical laboratory sciences, and other special programs, the number of credits required is indicated in the program outline. (See the Programs and Courses chapter in this Catalog for specific information.)

No more than one bachelor's degree is ever awarded to an individual by Elizabethtown College; however, students may complete a second major, a minor or teacher certification subsequent to graduation.

Program Requirements

Students are required to successfully complete all requirements of the major and the Core Program. The College does not guarantee graduation to any student who is unable to complete requirements of a specific program or academic major.

In addition to their major, students have the option of pursuing a second major and/or one or more minors. Second majors must include at least 16 credits not included in the first major. For each minor, the student must complete at least eight credits that are not used to fulfill the requirements of the major(s) or another minor.

Second majors and minors represent additional knowledge and interest in areas outside the first major. Therefore, second majors and minors must be selected in disciplines outside the first major, and additional minors must be selected in disciplines outside the first minor. Major and minor disciplines are determined by the predominant course prefix of the major/minor course requirements. For Secondary Education majors, the major subject area is considered to be the discipline of the major.

Grade Point Average

To be eligible for graduation, a student must have a cumulative grade point average of at least 2.00, with a minimum average of 2.00 in a major (and a 2.00 in a minor, if the minor is to be recorded on the student's transcript). A student who transferred from another college to Elizabethtown College must have an average of at least 2.00 in courses pursued in residence at Elizabethtown.

On-Campus Credits

To meet graduation requirements, the student must earn on-campus credits as follows: l) a minimum of 16 credits in the major, at least eight of which are at the upper level (normally 300 and 400 level) and 2) at least 30 of the last 60 credits. To recognize completion of a minor on the transcript, a student must have completed at least eight credits of the requirements on the Elizabethtown College campus and must have earned a bachelor's degree at Elizabethtown College.

Note: Credits earned through the Dixon University Center in Harrisburg; the Lancaster campus; the BCA Study Abroad program; Nihon University; the International Study Centre at Herstmonceux Castle in East Sussex, England; AustraLearn or American University's Washington Semester while the student is matriculated at Elizabethtown College are considered on-campus credits.

Other Requirements

Graduation requirements are governed by the College Catalog dated four years prior to graduation or, for major or minor requirements, by the College Catalog in effect at the time of graduation, if the student so chooses. For most students, this means they will follow the requirements of the Catalog in effect when they begin their studies at Elizabethtown College. Students who choose to change Catalog years for their major or minor to the one in effect at the time of graduation must inform their academic advisor and the Office of Registration and Records by the end of the fall semester of their senior year. Students **may not use a combination** of College Catalogs to complete a major or minor. Transfer students are subject to the requirements of the College Catalog in effect when they begin studies at Elizabethtown College or, for major requirements, the one in effect at the time of graduation.

Students may not normally use a College Catalog dated more than four years prior to graduation to determine requirements for a degree. The only exception to this is for students who have been continuously enrolled for more than four years.

Elizabethtown College will graduate only those students who meet the moral and financial obligations incurred in pursuit of their studies. The completion of the required number of credits does not in itself constitute eligibility for graduation.

It is the responsibility of the candidate for a degree to make formal written application for the degree to the Office of Registration and Records by the stated deadline.

The Office of the President must be notified by any student who plans to graduate in absentia.

Graduate Program

Many components of the graduate program at Elizabethtown College are facilitated the same way as the undergraduate program. Course registration, graduation clearance and credit transfer are processed by the Office of Registration and Records in the same manner as they are for the undergraduate program.

The following policies apply only to graduate students: 1) The minimum number of credits required to be full-time is nine. Students may not take more than 16 credits without following the Petition for Overload procedure and being assessed and charged per overload credit; 2) All but three courses must be taken on-campus; 3) The maximum number of courses allowed for transfer is three; 4) Pass/No Pass does not apply unless the course is offered Pass/No Pass; 5) Latin honors and the Dean's List do not apply; and 6) Only courses graded F may be repeated.

The minimum overall grade point average needed to stay in the program is 3.00. Not meeting the minimum overall grade point average may result in suspension from the College. To be readmitted, the student must petition the Academic Standing Committee.

It is up to the discretion of the student's major Department to determine if undergraduate and graduate courses may be taken concurrently. Graduate courses may count toward undergraduate programs; however, undergraduate courses may not count toward graduate programs. Undergraduate program courses taken by graduate students to complete credit deficiencies are free elective credits only and do not fulfill any major requirements. Graduate courses may not be met via Challenge Tests.

Academic Judicial System

Responsibility for judicial matters of an academic nature is assumed by the Academic Standing Committee and the Academic Review Committee. The Academic Standing Committee handles matters pertaining to academic probation, academic dismissal, readmission and deviations from the academic curriculum of the College. The Academic Review Committee handles matters pertaining to academic dishonesty and student appeals of course grades.

Academic Due Process

At Elizabethtown College, academic due process is understood to include the following student rights:

With Regard to Grading:

To receive a specific explanation of the manner in which a course grade was determined.

To appeal a course grade if the student believes that a grade was influenced by matters other than academic performance, class attendance and punctuality in submitting assignments.

With Regard to Academic Dishonesty:

When penalized for academic dishonesty, to receive a written notification specifying the nature of the infraction and the recommended penalty.

To request a hearing before the Academic Review Committee when found by a faculty member to be in violation of the standards of academic integrity and to receive a written statement from that board summarizing the findings of the board and its disposition of the matter.

To request a hearing before the Academic Standing Committee when recommended for academic dismissal due to cheating, plagiarism or other violations of the standards of academic integrity.

To inspect any information on file in the Office of the Provost dealing with incidents of academic dishonesty attributed to that student.

Standards of Academic Integrity

Elizabethtown College assumes that students will act honorably. Students are expected to adhere to the Pledge of Integrity adopted by both the students and the faculty in 1995:

Elizabethtown College is a community engaged in a living and learning experience, the foundation of which is mutual trust and respect. Therefore, we will strive to behave toward one another with civility and with respect for the rights of others, and we promise to represent as our work only that which is indeed our own, refraining from all forms of lying, plagiarizing and cheating.

Reflecting commitment to the pledge, new students are expected to sign a pledge stating, "I pledge to be honest and to uphold integrity."

Academic dishonesty – including cheating and plagiarism – constitutes a serious breach of academic integrity. Academic work is expected unequivocally to be the honest product of the student's own endeavor.

Cheating is defined as the giving or receiving of unauthorized information as part of an examination or other academic exercise. What constitutes "unauthorized information" may vary depending upon the type of examination or exercise involved, and the student must be careful to understand in advance what a particular instructor considers to be "unauthorized information." Faculty members are encouraged to make this definition clear to their students.

Plagiarism is defined as taking and using the writings or ideas of another without acknowledging the source. Plagiarism occurs most frequently in the preparation of a paper, but is found in other types of course assignments as well.

Other forms of academic dishonesty include (but are not limited to) fabrication, falsification or invention of information when such information is not appropriate. To knowingly help or attempt to help another student to commit an act of academic dishonesty is considered to be an equivalent breach of academic integrity and is treated as such.

Cases of academic dishonesty are reviewed individually and according to the circumstances of the violation; however, students who violate the standards of academic integrity can normally expect a grade of F in the course and/or possible dismissal from the College.

Procedures for Dealing with Cases of Academic Dishonesty

Instances Involving Coursework. The following is a series of steps taken in instances of academic dishonesty involving course work:

> **Initial Conference**. When an instructor discovers evidence of academic dishonesty, an informal conference is scheduled promptly with the student or students involved. If a professor is unable to schedule a conference before grades are due, a grade of Incomplete for the course may be assigned in the interim. If the student confirms his or her academic dishonesty in the initial conference, then the procedure continues with the written notification step below.
>
> **Second Conference**. If, in the informal conference, the student denies academic dishonesty but the instructor is satisfied that there is evidence of academic dishonesty, a second conference is scheduled with the student involved. In cases involving more than one student, either individual or group

conferences may be appropriate depending on the particular circumstances of the case. This conference should include another faculty member selected by the instructor. The student also has the right to have a faculty member, another student or a member of the Center for Student Success present as an observer.

Written Notification. If following either the first or second conference, the initiating faculty member is satisfied that there is proof of academic dishonesty, the faculty member will – with the approval of the Department Chair or equivalent – give the accused student(s) written notification specifying the infraction and the recommended penalty. A copy of this notification is sent to the Office of the Associate Dean of Faculty. Should the Department Chair not be in agreement with the faculty member and the matter not be resolved at the Department level, both the faculty member and the Department Chair will give written notification with rationale to the Associate Dean of Faculty. The Associate Dean of Faculty will review the matter and recommend action and will inform the student in writing of the recommended action.

Reported Cases. Cases of alleged academic dishonesty reported by a student or students or College staff and not resolved by the professor and Department Chair also may be referred to the Associate Dean of Faculty. The Associate Dean of Faculty will review the matter and recommend action and will inform the student in writing of the recommended action.

Academic Review Committee. The accused student(s) will have the alternative of accepting the recommended penalty or requesting a hearing before the Academic Review Committee. The request for a hearing must be presented in writing to the Associate Dean of Faculty within five days of receipt of the notice of information.

Dismissal. The Associate Dean of Faculty will review cases of academic dishonesty and exercise judgment as to whether a student found to be in violation of the standards of academic integrity should be recommended for dismissal from the College. If it is the Associate Dean of Faculty's judgment that academic dismissal is appropriate, the Associate Dean of Faculty will notify in writing both the student and the Academic Standing Committee of his or her decision and the factors that influenced that decision.

Hearing. The student will have the option of accepting the Associate Dean of Faculty's decision or requesting a hearing before the Academic Standing Committee. The request for a hearing must be presented in writing to the Chair of the Academic Standing Committee within five days of receipt of the Associate Dean of Faculty's decision.

Other Instances

All forms of dishonesty in academic matters are violations of the Standards of Academic Integrity and are the concern of the Academic Review Committee. Inappropriate actions – for example, lying to College officials or forgery of an advisor's signature – are violations equivalent to cheating and plagiarism in course work. Such dishonesty will be dealt with following the general procedures set forth above. Cases are reviewed individually and according to the circumstances of the violation; possible penalties include suspension or dismissal from the College.

Grade Appeals

Grades are considered to be official at the time submitted by the faculty. Questions concerning grades must be called to the attention of the instructor immediately after the official grade report is received. Formal grade appeals must be submitted within 30 working days of the date on which the grade was issued from the Office of Registration and Records. An exception to the 30-day time limit requires formal petition to and approval of the Academic Standing Committee.

Procedures For Grade Appeals

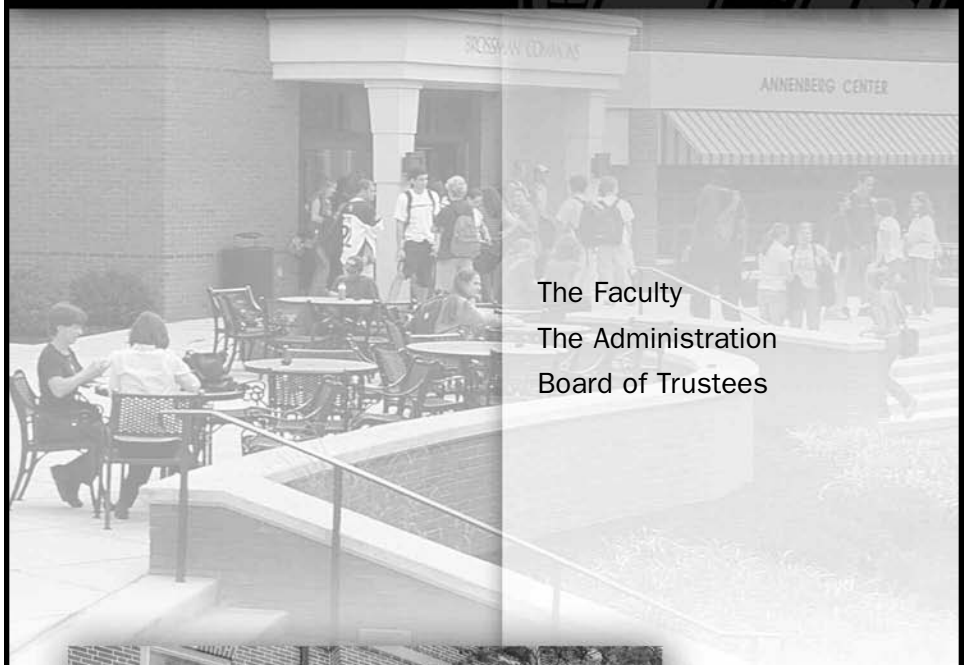
If a student believes that a final grade has been influenced by matters other than academic performance, class attendance and punctuality in submitting assignments, the student may request an informal conference with the instructor to discuss the matter.

If the outcome of the informal conference is not satisfactory, the student may submit a request in writing for a meeting on the matter to the Department Chair or another faculty member in the Department in instances involving the Chair. For the meeting, the student will prepare a written statement outlining the basis for the appeal.

The decision regarding the course grade in question will be made by the faculty member in consultation with the Chair or the other faculty member in the Department in instances involving the Chair. The student will receive immediate, written notification of that decision. Should the faculty member and the Department Chair not be in agreement and the matter not be resolved at the Department level, both the faculty member and the Department Chair will give written statements to the Provost explaining the reasons for upholding or altering the grade. The Provost then will review the matter and recommend action, and will inform the student in writing of the recommended action.

The Provost will review the detail of the appeal. The Academic Review Committee will hear warranted appeals as determined by the Provost.

Directory



The Faculty
The Administration
Board of Trustees

The Faculty

Theodore E. Long, *President; Professor of Sociology* (1996)
B.A., Capital University; M.A., Duke University; Ph.D., University of Virginia

Susan Traverso, *Provost and Senior Vice President; Professor of History* (2007)
B.A., Simmons College; M.A., Ph.D., University of Wisconsin – Madison

Christina A. Bucher '75, *Dean of Faculty; Carl W. Zeigler Professor of Religion (1987)*
B.A., Elizabethtown College; M.A.Th., Bethany Theological Seminary; Ph.D., Claremont Graduate School

The date after faculty member's title is the year that the individual joined the College.

Professors

E. Douglas Bomberger, *Professor of Music*; *Chair, Department of Fine and Performing Arts* (2005)
B.A., Goshen College; M.M., University of North Carolina at Chapel Hill; Ph.D., University of Maryland at College Park

David S. Brown, *Professor of History* (1997)
B.A., Wright State University; M.A., University of Akron; Ph.D., University of Toledo

Christina A. Bucher '75, *Dean of Faculty; Carl W. Zeigler Professor of Religion (1987)*
B.A., Elizabethtown College; M.A.Th., Bethany Theological Seminary; Ph.D., Claremont Graduate School

Jane F. Cavender, *Professor of Biology* (1993)
B.A., University of Delaware; M.S., Ph.D., The Pennsylvania State University

Paul M. Dennis, *Professor of Psychology* (1968)
B.A., Bowdoin College; M.A., Ph.D., New School for Social Research

David C. Downing, *R.W. Schlosser Professor of English* (1994)
B.A., Westmont College; M.A., Ph.D., University of California Los Angeles

Milton D. Friedly, *Professor of Fine Arts* (1987)
A.A., Northwest Community College; B.F.A., Arizona State University, Tempe; M.F.A., University of Wyoming

Paul Gottfried, *Professor of Humanities; Raffensperger Chair of Humanities* (1989)
A.B., Yeshiva University; M.A., Ph.D., Yale University

James L. Haines '80, *Professor of Music* (1994)
B.S., Elizabethtown College; M.M., West Chester University; Ph.D., University of Minnesota

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